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**HISTORY OF THE ROYAL  
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# HISTORY OF THE ROYAL REGIMENT OF ARTILLERY

1815-1853

BY

LIEUT.-COLONEL HENRY W. L. HIME

LATE R.A.

LONGMANS, GREEN, AND CO.

39 PATERNOSTER ROW, LONDON

NEW YORK, BOMBAY, AND CALCUTTA

1908

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## PREFACE

THE difference between the general plan of this book and Colonel Francis Duncan's admirable "History of the Royal Regiment of Artillery" was a matter of necessity, not of choice. Colonel Duncan selected for his landmarks a number of campaigns and sieges in which the Artillery played a prominent part, and connected them skilfully by an account of the progress of the *personnel* and the *matériel* during the intervals. No such landmarks were to be found in the present case. The war services of the Regiment were few and obscure, and the only available landmarks were struggles in Parliament about proposed reductions or augmentations and changes in the organisation of the arm.

The facts related in the following pages are necessary to connect the Artillery of 1815 with the Artillery of 1854, but Officers will probably feel as

little pleasure in reading them as the present writer felt in recording them. It was only at the request of the Committee, Royal Artillery Institution, that he undertook the history of these "old, unhappy, far-off things."

27 WEST PARK GARDENS, KEW,  
30th July, 1908.

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TO avoid the frequent repetition of the exceedingly long titles which some of the older writers gave to their writings, the titles of a few of them are given here, once for all, and they will be referred to hereafter by the writer's surname only.

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<sup>1</sup> The names of these three anonymous writers are written in ink on the title pages of the copies of their tracts belonging to the R.A.I., in the unmistakable handwriting of Gen. Sir Henry Lefroy, C.B., K.C.M.G., R.A.



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- 

The writer begs to thank the many officers who have assisted him by information or advice; among them Col. H. B. O. Savile, late R.A.; Gen. Sir R. Biddulph, G.C.B.; Capt. Sir A. Noble, Bart., K.C.B., late R.A.; Capt. T. Longworth Dames, late R.A.; Maj.-Gen. P. H. Sandilands; Lieut.-Gen. H. L. Geary, K.C.B.; Maj.-Gen. J. Desborough, C.B.; Maj.-Gen. A. K. Rideout, C.B.; Maj.-Gen. J. M. Grierson, C.B.; Col. J. R. J. Jocelyn; Col. E. S. May, C.B.; Lieut.-Col. Sir H. W. W. Barlow, Bart.; Major J. H. Leslie, late R.A.; Capt. A. F. Becke, late R.A.; and Mr. A. G. Hadcock, late R.A. The book could not have been written without the assistance of Mr. James Browne, author of "England's Artillerymen," formerly Bandmaster R.H.A. Band.

## CHAPTER I

### THE REGIMENT IN 1815

It was the good fortune of Colonel Francis Duncan, in his "History," to fall upon the period 1716-1815. His book is an animated account of the birth and growth of the Regiment and of its brilliant war services for nearly a century. The following chapters, in which its history is continued to 1854, are little more than a dreary chronicle of the wane of the Artillery from the battle of Waterloo until the middle of the century, when its decline was stayed by a reaction against the military weakness of the country.

Although nothing to which man puts his hand can be perfect, there is no doubt that in 1815 our Troops and Companies approached perfection as nearly as anything human can. General Foy, who inspected those in Portugal after the Convention of Cintra, 1808, and who served against them from the renewal of the war until the battle of Orthes, 1814, speaks thus of the means of draught: "Les harnais ressemblent aux harnais de nos carosses. Aucune nation ne peut le disputer aux Anglais pour l'attelage et le transport des voitures. Ne

A

6

## 2 ROYAL REGIMENT OF ARTILLERY

sont-ils pas destinés à troubler le monde, ces hommes qui, par terre et par mer, ont les moyens organisés pour arriver sûrement et promptement en tous lieux?"<sup>1</sup> Shortly before Waterloo Marshal Marmont, himself an Artillery Officer, after minutely inspecting F Troop, Lieutenant-Colonel James Webber Smith, said "the equipment in every respect was very far superior to anything he had ever seen."<sup>2</sup> In 1815, during the occupation of Paris by the Allies, Captain Parrizot of the French Artillery, in a memoir on our Artillery, pronounced it to be superior to all others in the following points: first, interchangeability of *matériel*; secondly, ease of limbering up and unlimbering; thirdly, the construction of the wheels; fourthly, the transport of the gunners of the Brigades; and fifthly, the system of draught. Further, the French Government appointed a committee of Artillery Officers to report on the several foreign Artilleries that took part in the grand review held on the 23rd October 1818. After noticing the peculiarities of the various systems—the English guns with 8 horses; the Russian waggons with 3 horses abreast; the Danish heavy field-guns with 12 gunners a gun; the Saxon Batteries with a gunner on the off-leaders of the gun and waggon, 2 gunners on the trail-seat, and 2 on the waggon limber—the committee unhesitatingly gave the

<sup>1</sup> *Histoire de la Guerre dans la Péninsule*, i. 294.

<sup>2</sup> "Letters of Sir A. S. Frazer, R.H.A., during the Peninsular and Waterloo Campaigns," p. 502.

palm to the English Batteries. They were particularly delighted with the manœuvres of one of the Brigades over very difficult ground, and they generously confessed that no French Battery could have cleared the ground like the English. "By mounting the gunners on the gun-limber and waggon," said the committee, "by ridding them of their cumbrous and useless carbines, and by attaching the knapsacks to the carriages . . . the English have made the Field Batteries a new arm."<sup>1</sup> Of our carriages at this period General H. Müller says: "The system was so solid, so practical, and especially so mobile, that it was looked on as a pattern. It was the envy of some foreign Powers, and was adopted with slight alterations by others."<sup>2</sup>

Finally, no one can dispute the competence of General Foy to pronounce judgment upon the bearing of our gunners in action—a foreigner and an enemy who faced them in the field for five years. This judgment he gives in the following words: "Les canoniers se distinguent entre les autres soldats par le bon esprit qui les anime. En bataille leur activité est judicieux, leur coup-d'œil est parfait, et leur bravoure stoïque."<sup>3</sup>

Such were the visible merits of our Artillery in 1815; yet there was a flaw in the mechanism which was invisible, whether at reviews or in action, to ordi-

<sup>1</sup> For Parrizot's Memoir and the Report of the Committee, see Favé's *Le Passé et l'Avenir de l'Artillerie*, v. 72, 76, 78, 84.

<sup>2</sup> Müller, i. 9.

<sup>3</sup> Foy, as before quoted.

#### 4 ROYAL REGIMENT OF ARTILLERY

nary foreign observers, although it had not escaped the notice of one eminent man, Scharnhorst, when serving under H.R.H. the Duke of York in the Low Countries.<sup>1</sup> "The English Artillery," he wrote in 1806, "have always been distinguished for their bravery, in spite of the want of a judicious and systematic organisation. Their conduct at Minden gained for them the special thanks of Prince Ferdinand; the successful defence of Gibraltar was entirely due to them; and in the wars of the French Revolution no soldiers were before them in willingness and courage."<sup>2</sup> In truth, above and beyond the single Troop and Company our Artillery was unorganised. This was perhaps inevitable from the rapid growth of the Arm. Beginning as a very small cottage, additional rooms were almost immediately required, a new storey soon became necessary, and finally large wings had to be added. Architectural symmetry was not to be expected in such an edifice, and it possessed none, either in England or on the Continent.

The consequences of this want of proper organisation were exposed in 1818 by Sir Augustus Frazer, R.H.A.: "At Woolwich, the headquarters of the corps and the source, or supposed source, of instruction, Officers were occasionally directed by the Orders of the Garrison to take out field-guns to exercise; receiving (garrison) artillerymen

<sup>1</sup> *Scharnhorst u. d. Durchführung d. allgem. Wehrpflicht*, W. Weise, 1892, p. 15.

<sup>2</sup> *Handbuch der Artillerie*, ii. 607.

from the Adjutant on duty, the drivers from the Driver Corps, and the guns from a park formed for the purpose. If, in seasons of more than usual diligence, this field exercise was repeated in the course of the same day, the artillerymen, drivers and horses were generally different in the afternoon from those in the morning. It is needless to say that this strange mode of attempting to teach what is only attainable by patient, quiet, and repeated instruction under the same person, could lead to nothing but confusion. . . . On its being intended to send out an expedition from England, the Companies of Artillery, which are intended to accompany it, receive orders to hold themselves in readiness for foreign service. The Companies are generally—indeed, it might be said always—at different stations, usually belong to different Battalions of Artillery, and, as may be supposed, are frequently in different states of readiness and efficiency. A Commissary of Ordnance is also put under orders, and is charged with the responsibility of the ordnance, ammunition, and stores. . . . The drivers and horses required for the service are assembled from various points, and are embarked under the direction of the senior Officer of the Driver Corps. The drivers and horses are not told off or distributed to any number of guns or carriages, but are embarked in one disposable body. In this situation it becomes the duty of the senior Artillery Officer, after he shall have received the directions of the General Commanding the expedition, to

## 6 ROYAL REGIMENT OF ARTILLERY

arrange the Arm committed to his charge ; to fix the number of the Brigades of Artillery, and of how many field-pieces and of what calibre of those embarked they shall consist ; to determine what Companies shall be applied to the Brigades and what shall remain in reserve ; how the Field Officers shall be distributed ; how the drivers and horses shall be told off ; how the reserves of ammunition, both for Artillery and small-arms, shall be appointed ; and, generally, how an organised body shall be formed out of the component parts, which successively arrive from different stations at the point of debarkation. Let it be supposed that these component parts are all separately good, that the Officers and men are well equipped and well instructed, the drivers in all respects well appointed and drilled, and the horses strong and well trained. Yet, even on this supposition, these parts must be unknown to each other ; there must be a want of unity of system ; the Officers must receive their ordnance and ammunition on the faith of the Commissary and almost without examination ; the harness cannot be expected to fit ; new regulations as to interior arrangements must be made at the moment, and under all the disadvantages of hurry and of every individual's being placed in a new situation. In short, under the most favourable circumstances . . . all that can be effected is . . . that the Brigades are put together and hastily formed. . . .

“ But if, instead of this, it be supposed—as is

known to be the real case—that in Companies coming from different points and from different services, very different degrees of instruction or efficiency exist; if some have not for years gone through even the bare formality of drill with field-guns . . . if the drivers be in many cases ill instructed, and in others not at all; if their accounts be entangled in confusion; if the horses be frequently of an indifferent description, and rarely, as a body, in that state of good condition which a mass unbroken into regular subdivisions seldom attains; if harness tried for the first time cannot, without many unavoidable alterations, fit horses of different shapes; if, in short, all the various parts of which the Field Artillery is composed be in this unformed state, what can for some time be expected from it, even if it should not be immediately brought into contact with the enemy?"<sup>1</sup> The Officers who could evoke order and efficiency out of such chaos must have been men of no common mould.

The promotion of the Officers was very slow. From the Army List, January 1823, it appears that at this time there were:—

186 Captains of Cavalry, of whom 4 only	}	were senior to the <i>Junior</i> Captain of Artillery.
981 Captains of Infantry, of whom 80 only	}	were senior to the <i>Junior</i> Captain of Artillery.
279 Lieutenants of Cavalry, of whom 3 only	}	were of the same year as the 11 Senior Lieutenants of Artillery. <sup>2</sup>
and 1527 Lieutenants of Infantry, of whom 18 only	}	

<sup>1</sup> Frazer, p. 57 ff.

<sup>2</sup> Heron, p. 17.



## 8 ROYAL REGIMENT OF ARTILLERY

During the concluding campaigns in the Peninsula, the Artillery numbered 6279 Officers and men and 4408 horses and mules, commanded by a Captain, with the brevet rank of Lieut.-Colonel.<sup>1</sup> In the Waterloo campaign the Artillery numbered 7500 all ranks and 5800 horses and mules, commanded by a Lieut.-Colonel, with the brevet rank of Colonel, who was the oldest man in the field at Waterloo.<sup>2</sup>

From army commands the Officers of Artillery were rigorously excluded, and General Foy could safely prophesy: "Jamais de l'école de Woolwich ne sortira un Bonaparte."<sup>3</sup>

The N.-C. Officers and men received Cavalry pay, with certain additions after seven years' and fourteen years' service; the Horse Artillery gunners received 2d. a day more than the Foot Artillery. The men of the Driver Corps also received Cavalry pay, but only received additional pay after ten years' and seventeen years' service.<sup>4</sup>

There existed "no printed or written directions for exercise." Every Captain was therefore left, in great measure, to his own discretion and general ideas of the service; and there was naturally "a want of uniformity in the mode of drilling the Companies, many of which may be said to have been scarcely drilled at all."<sup>5</sup>

<sup>1</sup> Letter from Sir A. Dickson to Sir Henry Hardinge, K.C.B., 26th April 1831, in Dickson Papers. The above figures give the strength for December 1813.

<sup>2</sup> Frazer, p. 149, note 7.

<sup>3</sup> *Histoire de la Guerre de la Péninsule*, ii. 297.

<sup>4</sup> Frazer, p. 5.

<sup>5</sup> *Ibid.*, p. 12.

## THE REGIMENT IN 1815

TABLE A

Troops.	Companies.	Invalids (Comps.)	Driver Corps (Troops).
14	100	12	12

TABLE B

Officers, <sup>1</sup>	N.-C. Officers and Men. <sup>2</sup>	Total.	Driver Corps <sup>2</sup> (all ranks).	Horses <sup>1</sup> and Mules.
614	16,248	16,862	6,223	8,972

The Army of Occupation left in France when the rest of the Waterloo army returned home, 1815-16, consisted of about 30,000 men, with 60 field-guns. These were the guns of G Troop, second Captain E. Y. Walcott; H Troop, second Captain A. Macdonald; I Troop, Major R. Bull; and of 7 brigades commanded by Major S. W. Unett, Captain F. Gordon, Major T. Rogers, Major W. Holcroft, Major L. Carmichael, Captain T. Huchesson, and Captain A. Hunt. A Lieut.-Colonel and a Major were posted to the Horse Artillery and 2 Lieut.-Colonels and a Major<sup>3</sup> to the Brigades. There were also: 1 Company for siege operations; 3 Ball-Cartridge Divisions, with a Lieut.-Colonel and 3 junior Officers; a Reserve under Major

<sup>1</sup> Heron, p. 32.

<sup>2</sup> Third Report, Select Committee on Finance, May 1817.

<sup>3</sup> This rank was abolished 16th November 1827.

# 10 ROYAL REGIMENT OF ARTILLERY

E. C. Whinyates ; a small detachment under second Capt. and Adjut. H. Blackley ; and a Pontoon Train attached to the Royal Engineers.

The establishment of the Company, which is not given by Sir J. H. Lefroy, is otherwise known to have been as follows :—

TABLE C<sup>1</sup>  
A COMPANY, ARMY OF OCCUPATION

Captains.	and Captains.	Lieutenants.	and Lieutenants.	N.-C. Officers.	Drummers.	Gunners.	Total.
1	1	2	1	10	2	94	111

The minor details of the Horse Brigade are not given ; but as it consisted of three Waterloo Troops,<sup>2</sup> somewhat reduced, the following was almost certainly its establishment. The Driver Corps was apparently made up of 3 N.-C. Officers, 6 shoeing smiths, 3 collar-makers, 3 wheelers, and 24 drivers.

TABLE D<sup>2</sup>  
HORSE BRIGADE, ARMY OF OCCUPATION

Offs.	N.-C. Offs.	Trumprs.	Grs.	Drs.	Artifs.	Driver Corps.	Total.
17	42	3	255	168	21	39	545

<sup>1</sup> Duncan, ii. 441.

<sup>2</sup> The details of the Waterloo Troop are given in Table I.

*Horses and Mules*

In Draught.		Riding and Spare.	
18 Guns. . . 144	Horses . 276	6 Horses for Staff Sergeants	
18 Amm. wgn. 108		3 " " Trumpeters	
3 Spare gun c. 24		144 " " Gun Detachments (8)	
3 Forges . . 18		3 " " Artificers	
3 Store carts . 18	Mules . . 42	3 " " N.-C. Offs., Driver Corps	
3 Curricule carts 6		36 " spare ( $\frac{1}{14}$ )	
—		3 Mules "	
48 Carriages	318	198	
	516		

From Sir J. H. Lefroy's figures and other sources the following appears to have been the state of the Reserves and the amorphous Brigades:—

TABLE E  
BRIGADES AND RESERVES, ARMY OF OCCUPATION

	R.A. <sup>1</sup>				Driver Corps. <sup>2</sup>				
	Offs.	N.-C. Offs.	Drummers.	Grns.	Offs.	N.-C. Offs. and Trumps.	Artifs.	Drs.	Horses and Mules.
7 Brigades . .	38	50	7	490	7	71	49	482	684
3 B.C. Divns.	4	9	3	54	3	16	21	130	211
Reserve . . .	1	3	1	16	1	5	5	66	37
Adj't. 's Detacht.	1	1	1	...	5	7	4	28	18
	44	63	12	560	16	99	79	706	
	Total R.A., 679				Total Driver Corps, 900				950

<sup>1</sup> Duncan, ii. 441. The combined strength of the 1 Company, Table C, and the Brigades above is 790, Duncan's figure. The gunners of each Brigade were 70, Lefroy's figure.

<sup>2</sup> Lefroy, p. 170.

TABLE F<sup>1</sup>

PONTOON TRAIN, ARMY OF OCCUPATION  
(EXCLUSIVE OF THE ROYAL ENGINEERS)

(a) *Horses and Mules*

Draught.			Riding and Spare.	
36 Pontoon carriages . . .	216	} . 240	4 Horses for Officers, Driver Corps	
4 Boats (on carrs.) . . .	24		20 " " N.-C. Offs. " "	
2 Forge waggons . . .	12	} . 76	2 " " Trumpeters " "	
8 Waggons for stores . . .	32		16 " " Artificers " "	
2 " " tools . . .	8		10 " spare	
4 Spare pontoon carrs. . .	24			
<hr/>				
56 Carriages		316	52	
		368		

The number of draught-horses is certain; the remainder have been calculated. Sir J. H. Lefroy gives the total of the drivers as 293, which appears to be a misprint for 193. The writer can only account for this number, all establishments having been reduced :—

*Drivers*

For draught and spare horses . . . . .		163
Grooms {	Officers . . . . .	4
	Senior N.-C. Officers and Artificers . . . . .	10
	Spare (cook's mates, &c.) . . . . .	16
<hr/>		
Total . . . . .		193

The establishment of the Driver Corps' portion of the Pontoon Train was consequently

<sup>1</sup> Lefroy, p. 170, and "Aide-Mémoire to the Military Sciences," article "Pontoons."

(b)

Officers.	N.-C. Officers.	Trumpeters.	Farriers.	Shoeing Smiths.	Collar-Makers.	Wheelers.	Drivers.	Total.
4	20	2	2	10	2	2	193	235

## SUMMARY

*Artillery of Army of Occupation*

	All Ranks.	Horses and Mules.
3 Troops . . . .	545	516
1 Company . . . .	111	...
7 Brigades . . . .	679	...
Driver Corps . . . .	900	950
Pontoon Train . . . .	235	368
	<hr/> 2470	<hr/> 1834

The "mean" Brigade, Table E, 170 of all ranks, with 96 horses, was so under-horsed that it could not have turned out complete for active service.

From Mr. J. Wilson Croker's account of a review at Paris, 20th July 1815, it appears that at that time we had some 4-gun 12-pounder Batteries. "The Artillery consisted of twenty-four 6-pounder brass guns, many of them marked N, which had been taken from the French, and eight 12-pounder guns. . . . The artillerymen and their escort were 629."<sup>1</sup>

<sup>1</sup> The Croker Papers, i. 70. "Escort" may possibly mean the mounted detachments, R.H.A. Mr. Croker is said to have been the original of Rigby in Disraeli's "Coningsby."

## CHAPTER II

### THE REDUCTIONS, 1816-1823

WHEN the last *feu-de-joie* had been fired for the victory at Waterloo, and Napoleon had been consigned to the island of St. Helena, the order of the day was retrenchment. The close of the wars of the French Revolution found Europe exhausted and disillusioned. The famous "Declaration of the Rights of Man"<sup>1</sup> was branded by Jeremy Bentham, the prophet of the new Liberalism, as a "hodge-podge of confusion and absurdity."<sup>2</sup> Of the four Powers constituting the Grand Alliance, Russia had spent vast sums in resisting Napoleon's invasion and in her previous and subsequent campaigns; Austria was enfeebled and almost bankrupt; Prussia was in not much better case; and England was burdened with the greatest National Debt ever as yet incurred by any nation—£861,000,000. The weight of this debt and the commercial reaction after a long series of wars combined to produce a terrible crisis. The trades created or inflated by the war were, of course, the first to suffer. "A

<sup>1</sup> Given in Mr. Rose's edition of Carlyle's "French Revolution," i. 346.

<sup>2</sup> Cambridge History, "The Restoration," X. 4. Burke had already described the Declaration as "a sort of institute and digest of anarchy."

sudden cessation of demand caused great distress among gunmakers, braziers and workers in steel and iron; among contractors, clothiers and tanners. Landlords and farmers suffered from an enormous depression in their prices, which had been artificially stimulated by the continental system.<sup>1</sup> . . . The year 1816 produced a very bad harvest, farms went out of cultivation, and in some parishes half the inhabitants were supported from the rates.”<sup>2</sup> Wholesale military retrenchment, then, was an absolute necessity, and none recognised this more readily than Artillery Officers. “Every man who has a feeling of patriotism about him,” says Captain Heron, “will acknowledge that economy was necessary” (p. 35). Nor did they overlook the sufferings of the people. The subscriptions of the Artillery Officers of the Army of Occupation for the poor in England, sent home from Valenciennes, 1816, amounted to £100.<sup>3</sup>

In carrying out a reduction of troops two general principles ought to be adhered to as closely as circumstances will permit. First, following the plan pursued by Nature, we ought to select for reduction the weakest and worst elements, retaining those best fitted for war. Secondly, except from sheer necessity we ought never to destroy a unit, a Battalion of Infantry or a Battery of Artillery; we

<sup>1</sup> Napoleon's system, 1806, under which English goods were seized everywhere, and the harbours of neutrals closed against English ships under threat of war with France.

<sup>2</sup> Cambridge History, X. chap. xviii.

<sup>3</sup> Lefroy, p. 165.



should if possible preserve a nucleus or kernel. The effect of the first principle is self-evident. By sacrificing the weakly and the vicious we get rid of one body of men not likely to be efficient in the field, and of another whose discharge entails little or no expense, most, if not all, of them having forfeited their claim to pension. The value of the second principle was perfectly understood by the Artillery Officers of the day. "The wisdom of keeping up skeletons of corps during peace," says Captain Heron, "no one can doubt. . . . A sufficient number of well-instructed and experienced old soldiers should be retained, not only to admit of salutary reliefs in the various duties, but also of instilling soldierly and professional habits into the new men, when the time arrives for enlarging the establishment."<sup>1</sup> For example, if we have thirty-four 6-gun Batteries of Field Artillery<sup>2</sup> and a reduction of 17 Batteries, or 102 guns is ordered, the worst of all plans is to reduce 17 complete Batteries; for we thus preserve 17 units only, and on augmentation (which is certain to come sooner or later), 17 entirely new Batteries must be created. In such a case we might retain 9 complete Batteries (say 2 Horse and 7 Field) and form twenty-four 2-gun Batteries, thus preserving 33 units out of 34, or we might follow some similar plan which financial exigencies permitted.

Mr. R. Cobden, the spokesman of the Man-

<sup>1</sup> Page 33.

<sup>2</sup> This phrase, here and throughout, is used in its original, general and proper meaning. See Appendix A.

chester School, flouts this principle: "If you wished to reduce the army with the greatest economy to the people, and with the least loss of force, you should reduce the number of Regiments by amalgamating them, and retain their bayonets at the expense of the Officers."<sup>1</sup> It is unnecessary to discuss this suicidal proposal. In a sudden emergency recruits may be got, but experienced Officers cannot be found. Ill-trained troops would be thus entrusted to ill-trained Officers: the blind leading the blind along the way to destruction.

Had the public in their scramble for economy paused for a moment to listen to soldiers, they would have learned that there are two ways of reducing troops, a dear way and a cheap way. But the public of 1816 were in no temper to listen to advice or to tolerate delay. The reductions, they shouted, must be begun. The reductions were begun. Guiding principles were cast to the winds, and we rushed to the demolition of our military establishments as if Satan had been bound for a thousand years and there was to be no more war.

As there has always been considerable doubt about the comparative reduction of the Artillery on the one hand and the rest of the Army on the other, it may be well to settle the matter here. The troops in India excluded, the "rest" of the Army in 1815 was 190,767 all ranks, and 72,140 in 1823.<sup>2</sup> Thus the reduction was 118,627, which is 62.1 per

<sup>1</sup> Speech, House of Commons, 8th March 1850.

<sup>2</sup> Clode, "Military Forces of the Crown," i. 399-400.

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cent. of their Waterloo strength. The Artillery was 16,862 all ranks in 1815, and 6365 in 1823. Thus the reduction was 10,497, which is 62.5 per cent. of the Waterloo strength. Therefore the reduction of the Regiment, in the strict sense of the word, was somewhat greater than that of the rest of the Army. But the reduction of the Artillery service was in reality much greater. Although the Driver

TABLE G  
ARTILLERY REDUCTIONS, 1816-1823

	Officers. <sup>1</sup>	N.-C. Offs. and Men. <sup>2</sup>	Total.	Driver Corps <sup>2</sup> (all ranks).	Horses. <sup>1</sup>
1815	614	16,248	16,862	6,223	8,972
1823	500	5,865	6,365	0	627
Diff.	114	10,383	10,497	6,223	8,345

Corps was not legally included in the Regiment, the transport of the whole of the Brigades and of a certain number of the carriages of the Horse Artillery was dependent upon it, and it cannot be ignored in considering the reduction of the Artillery in the broad sense of the word. The combined strength of the Artillery and Driver Corps in 1815 was 23,085 all ranks, and 6365 in 1823. The reduction was therefore 16,720, which is 72.4

<sup>1</sup> For officers, Heron, p. 32. He gives 590 for the horses of 1823. The difference, 37 horses, represents the "wanting to complete."

<sup>2</sup> Third Report of Select Committee on Finance, May 1817, and Ordnance Estimates.

per cent. of the Waterloo strength. Why that Arm which it requires the longest time, the greatest pains and the heaviest cost to make efficient should have been chosen for this reckless reduction, the writer is unable to say.

Although the Army and the Artillery underwent these great reductions during the years 1816-23, yet, for a reason to be explained presently, recruiting was going on all the time. The writer has not been able to ascertain the number of Artillery recruits enlisted during this period, but the number of Infantry and Cavalry recruits, 1816-21, both years inclusive, was 52,346.

We have now to inquire how far the two general principles, already pointed out, were followed in making the reductions.

The second principle, the preservation of units, was carefully observed in the Horse Artillery. Seven 2-gun Troops were formed out of the 14 guns saved from the wreckage, and the principle could be pushed no further. One whole Battalion and one Company of each of the remaining Battalions disappeared; but, considering the confusions and exigencies of the times, it cannot be said that the principle was overlooked in the Foot Artillery.<sup>1</sup>

The first principle was not strictly observed in reducing the Horse Artillery. It would be an impertinence to name any one Troop as "the best"; but it may be confidently asserted that the original

<sup>1</sup> The Troops and Companies reduced are given in Appendix B.

D Troop, which was attached to the Cavalry Brigade in the Peninsula, was among the best of the whole. Yet it was one of the four victims of 1816, although more than one of the surviving Troops had less brilliant histories.

In the case of the Companies of Artillery, and, it may be added, of the rest of the Army, the first principle was not observed at all; but for this disregard to the dictates of common sense neither the Government nor the military authorities were altogether responsible. On this occasion, if ever, the people gave their mandate, by riot, incendiarism, public meetings, and the newspaper press, which no Ministry could long resist. In compliance with the mandate the reductions were immediately begun,<sup>1</sup> with consequences which an eye-witness shall describe—Captain Heron (p. 34): “During the long war there were many Companies which, for want of proper arrangement, remained in what might with truth be called a banishment for many years; some had been absent from England more than twenty! . . . Time was of course required, after the close of the war, to relieve these Companies, when, unhappily for the service, just as this necessary measure was about to be executed, the cry for military reduction was at its noisiest crisis, and it was determined upon to commence the prun-

<sup>1</sup> The national expenditure fell from £106,800,000 in 1814 to £53,300,000 in 1818 (Walpole's “History of England since 1815,” i. 329). The navy was reduced by a single stroke of the pen from 100,000 in 1815 to 33,000 in 1816 (Maxwell's “Life of Wellington,” ii. 144).

ing system forthwith. . . . The Troops and Companies sent to the Peninsula and France had ripened their theory by practice; the men were excellent gunners, well inured and seasoned to the duties of the field, and were young enough for years of service yet to come. Many of these Companies were in England at this juncture, and, instead of waiting for a few months for the return of the Companies in foreign garrisons and in the colonies, it was considered necessary to begin by reducing those at home. Hundreds of these men, who preferred remaining with their old comrades in a corps to which they were devotedly attached and were proud of, were discharged and received pensions. . . . Some of their pensions exceeded their daily pay! . . . No sooner had this lamentable blow to the service been given . . . than the Companies from abroad poured into Woolwich! It is useless here to mention the habits and manners of an idle garrison where wine and spirits are cheap and abundant. The state and appearance of such Companies as arrived from the West Indies, Mediterranean, America, &c., can easily be imagined. Drunkenness, age, and the deleterious and debilitating effects of climate had done their worst, and rendered it necessary to discharge almost the whole of the men who returned. Can it be credited that it was only *now* to be discovered that there were not enough men left to do the common garrison duties? Recruiting parties were consequently sent out in all directions! Had it been determined on

to wait quietly and firmly in the first instance, when the reduction was contemplated, until the old Companies were relieved, and taken advantage of the time the execution of this measure would consume, to fix the peace establishment of the gunners, as nearly as it could be done, in all the Companies at home, and afterwards to have assembled the supernumeraries at headquarters . . . it would have been found that, after discharging the oldest and most worn-out men, a sufficient number would remain wherewith to fill the ranks of such Companies as were coming from abroad, and whose state . . . would naturally require reorganisation! Thus we find that hundreds of the very best men were discharged, and an equal number of pensions might have been spared to the country; that the expense of recruiting could, at least for some years, have been dispensed with; and lastly, the efficiency of the service need not have received so deep a wound—and all this was done for *economy!*"

This passage explains the extraordinary anomaly, already alluded to, of reduction and recruiting going on side by side, and it exposes the consequences of the mandate of the people—wanton waste of public money. First came a very large annual sum for the pensions of thousands of good soldiers, Infantry and Cavalry as well as Artillery, who were compulsorily discharged, much of which would have been saved but for the mandate. The cost of Army pensions in 1816 was £707,575, which rose to

£1,437,756 in 1828.<sup>1</sup> Secondly, owing to the dramatic disappearance of the foreign garrisons as they successively arrived home, came a very great outlay in recruiting—pay for the Officers and N.-C. Officers, travelling allowances, bringing money, bounty (which was £2, 12s. in 1822), &c., &c., all of which was caused by the mandate. A peremptory demand for rigorous reduction, to be carried out systematically in some definite and reasonable time, was needed to rouse our listless Ministers to action; but the actual mandate for immediate reduction was the work of a blatant and blundering rabble. Yet Mr. Cobden babbles, in his most popular manner, of mandates delivered “with that intuitive and instructive sagacity which had given rise to the adage, ‘The voice of the people is the voice of God.’”<sup>2</sup> There is nothing whatever in the mandate of 1816 that indicates divine dictation. In common with other mandates, it shows that “the fickle disposition of the multitude . . . is governed solely by emotions, not by reason. . . . Every one thinks himself omniscient and wishes to fashion all things to his liking, judging a thing to be just or unjust, lawful or unlawful, according as he thinks it will bring him profit or loss.”<sup>3</sup>

<sup>1</sup> Clode's "Military Forces of the Crown," ii. 281.

The "Cost of Pensions" and the "Effective Annual Strength" for these years approximate to two arithmetical series, the pension series increasing as the effective strength series decreases. Sir W. Gordon's evidence before the Finance Committee, 17th March 1828, i. p. 7, and Lord Hardinge's evidence, p. 367.

<sup>2</sup> Speech, House of Commons, 24th February 1842.

<sup>3</sup> Spinoza, "Theologico-Political Treatise," Elwes' trans., i. 216.



Even Jack Cade understood this: "Was ever feather so lightly blown to and fro as this multitude?"<sup>1</sup>

The reductions shown in Table G were not, of course, carried out by one stroke of the pen. There was a great reduction in 1816, gradual reduction during the next two years, a second great reduction in 1819, and gradual reduction until 1823, when the Regiment reached its nadir. The whole downward movement is summed up in Table G. It remains to show how the reductions affected the Troops, Companies, and Brigades.

The strength of a reduced Company, Troop, and Brigade are shown in the following Tables. The strength of a Waterloo Company, Troop, and Brigade have been added to enable the reader to form a just notion of the magnitude of the reduction.

TABLE H<sup>2</sup>

A COMPANY, 1815 AND 1817

	Captains.	and Captains.	Lieutenants.	and Lieutenants.	N.-C. Officers.	Drummers.	Gunners.	Total.
1815	1	1	2	1	17	3	120	145
1817	1	1	2	1	9	2	59	75

<sup>1</sup> "Second Part of Henry VI.," iv. 8.<sup>2</sup> Lefroy, p. 170.

No two Troops at Waterloo were of exactly the same strength. The Troop given in the following Table is the "mean" of the whole, but none of the actual Troops differed from it by more than a few men and horses. In taking the mean Captain E. C. Whinyates' Troop was excluded, because, being armed with rockets as well as guns, its strength was exceptional.

The Troops were very short of drivers, and but little assistance could be given them by the Driver Corps for a reason to be explained presently.

TABLE I<sup>1</sup>  
A TROOP, 1815 AND 1819

	R.H.A.						Driver Corps.		R.H.A.	Driver Corps.	
	Officers.	N.-C. Officers.	Trumpeters.	Gunners.	Drivers.	Artificers.	N.-C. Officers.	Artificers and Drivers.	Horses.	Horses.	Mules.
1815	5	15	1	82	60	7	1	20	164	26	18
1819	5	10	2	46	18	4	...	...	36 <sup>2</sup>	...	...

<sup>1</sup> Lefroy, p. 167, Frazer and Duncan.

As may be inferred from the number of horses unaccounted for, Captain Mercer's distribution of his horses (i. 160) is very unsatisfactory. It was written years after Waterloo, and he had forgotten the details. Twelve of the 30 horses he cannot account for belonged to his gun detachments; 2 to his spare gun-carriage, &c., &c.

<sup>2</sup> *i.e.* 22 riding and 14 draught horses.

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### *Horses and Mules, 1815*

In Draught.			Riding and Spare.		
6 Guns. . .	48	} Horses . .	2 Horses for S. Sergeants		
6 Amm. wgn. .	36		1 " " Trumpeter		
3 Spare " . .	18		60 " " Gun Detachments		
1 " gun c. . .	8		2 " " Artificers		
1 Forge . . .	6	} Mules . .	1 " " N.-C.O., Driver Corps.		
1 Store wgn. .	6		14 " spare		
1 Curricule cart	2		4 Mules "		
<hr/>			<hr/>		
19 Carriages		124	84		
		208			

### SUMMARY

1815 . . . 191 all ranks, with 208 horses and mules.  
 1819 . . . 85 " " " 36 horses.

Such was the establishment of the 7 Troops until 1828, when the 2 Troops in Ireland were raised to 4 guns each.

The R.A. portion of the following Brigade is the mean of the numbers known to have been present at Waterloo (including Captain J. Brome's, the present 65th Company, and Major G. W. Unett's, the present 66th Company). The details of the driver portion are not known. By regulation the number of drivers was 96,<sup>1</sup> but a week before Waterloo the drivers of the army were 1000 short.<sup>2</sup> This was very natural, for between the end of the war in the south of France and the Hundred Days the Driver Corps had been reduced by 1207 men. To meet this state of things the drivers have been here reduced to 70, the *minimum*

<sup>1</sup> Lefroy, p. 169.

<sup>2</sup> Duncan, ii. 415.

perhaps with which the Brigade could have been worked. The horses and mules were 163 by regulation. The difference, 5, is accounted for by 2 N.-C.Os. and 3 artificers of the Driver Corps being reduced below, to accord with the diminished number of drivers.

TABLE J  
A BRIGADE, 1815 AND 1817

	R.A.				Driver Corps.						
	Officers.	N.-C. Officers.	Drummers.	Gunners.	Officers.	N.-C. Officers.	Trumpeters.	Artificers.	Drivers.	Horses.	Mules.
1815	5	8	1	88	1	7	1	7	70	137	21
1817	5	9	2	59	...	2	...	3	10	20	...

*Horses and Mules, 1815*

In Draught.				Riding and Spare.			
6 Guns. . .	48	Horses . .	104	6 Horses for Officers			
6 Amm. wgn. 36				1	"	"	Trumpeter
2 Spare " 12				14	"	"	N.-C. Offs. and Artifs.,
1 " gun c. 8				Driver Corps			
1 Forge . .	6	Mules . .	18	12	"	spare	
1 Store wgn..	6			3	Mules	"	
2 Forage wgn. 4							
1 Curricule cart 2							
<hr/>				<hr/>			
20 Carriages				122	36		
				158			

SUMMARY

1815 . . 188 all ranks, with 158 horses and mules.  
1817 . . 90 " " " 20 horses.

That the Board of Ordnance would have gladly abolished the Brigades in the years 1816-17 there cannot be a reasonable doubt; but the state of the country forbade such a step, and the existence of the Brigades was assured for the moment by the turbulence of the people. At this time there were 2-gun Brigades (Table J) at Portsmouth, Plymouth, Weedon, and Leith. There was a 4-gun Brigade, 35 drivers and 46 horses, at Paddington in 1818, which was reduced the following year. It is believed that there were two 2-gun Brigades in Dublin about the same time.

Such was the state of things at the close of the year 1818, when the Army of Occupation returned from France. They were received at the ports of disembarkation by admiring crowds, and they marched to barracks to the tune of "See, the conquering hero comes!" Not many weeks had elapsed, however, ere most of the conquering heroes were trudging to their homes, discharged from the service, followed by a crowd of Officers hurriedly gazetted to half-pay. Nothing, as Don Quixote said after his affair with the windmills, nothing is so changeable as matters pertaining to war.

Before leaving the reductions of 1816-23, the reader must be reminded that they were not carried out *gratis*. Reduction is a costly operation. To mention only two years, the expense of reduction in 1816 was £200,000, and in 1817 £50,000.<sup>1</sup>

Let us now trace the effect upon the efficiency

<sup>1</sup> Third Report, Select Committee on Finance, May 1817, i. 684.

of the Artillery of a great reduction carried out in a hasty and ill-considered manner.

The Rocket Troop was quartered in Manchester in the early part of 1826, and on the 11th May 2nd Captain R. Hardinge, who was in temporary command, made the following official report to the Inspector of Artillery, Sir A. Dickson: "The harness and saddlery were condemned last summer, except the seats and flaps of the saddles. New collars and wheel traces supplied since, also breast-plates and cruppers (are) of a different pattern from the original ones. The pole of the 3-pounder carriage is too short and hurts the wheel horses in reversing or in hilly roads. The tubes of the 12-pounder carriages will not stand bad roads or rapid movements. Average age of the troop horses 9 years, including one of 18 and six of 16."<sup>1</sup>

The attitude of Spain towards Portugal had become so threatening that the Cabinet resolved, on Saturday, 9th December 1826, to send a force to protect the latter country.<sup>2</sup> The King sanctioned

<sup>1</sup> Dickson Papers. Letter Book, 1818-37, p. 260.

<sup>2</sup> Portugal had previously asked for British protection in 1823. "Whether it were desirable to send troops or not, it was unquestionable that there were no troops to send. Hume's retrenchments had stripped the country of all superfluous soldiery, and there was not a single regiment available for the service" (Walpole, "History of England since 1815," iii. 77-78). The meaning of the word "superfluous" in this passage is not quite clear, but it is perfectly clear that in 1823 we had not sufficient soldiers to support our interests abroad. So great was the want of men that, on the death of H.R.H. the Duke of York, the Duke of Wellington wrote to Lord Bathurst, 9th January 1827: The funeral "cannot be military, because we have not men enough in England to bury a Field-Marshal."

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their decision on Sunday, the matter was approved of by Parliament on Monday, and the troops were put in motion on Tuesday.

The Artillery of the force consisted of three 4-gun Brigades under Major E. P. Willgress, Major J. Taylor, and Captain W. Wylde, and a Ball-Cartridge Division under Major C. Bridge; the whole under Lieut.-Colonel J. Webber Smith, with Lieut. E. J. Bridges for Adjutant.

TABLE K  
A 4-GUN BRIGADE, PORTUGAL, 1826<sup>1</sup>

Officers.	Medical Officers.	N.-C. Officers.	Trumpeters and Drummers.	Gunner-Drivers.	Driver-Gunners.	Farriers.	Shoeing Smiths.	Collar-Makers.	Wheelers.	Total.
5	1	9	2	44	26	1	1	1	1	91

#### *Horses*

Draught.				Riding and Spare.			
3	9-pounder guns	.	18	5	Horses for Officers		
1	24-pounder Howitzer	.	6	1	" "	Med. Officer	
4	Ammunition waggons	.	16	5	" "	N.-C. Officers	
1	Forge	.	4	1	" "	Trumpeter	
1	Baggage cart	.	2	1	" "	Farrier	
2	Reserve ammunition waggons	.	0	6	" "	spare	
1	Spare gun carriage	.	0				
1	Store waggon	.	0				
<hr/>				<hr/>			
14	Carriages		46			19	
							65

<sup>1</sup> Lefroy, p. 181.

It might perhaps be imagined that Brigades which could be got ready for active service on so short a notice must have been in a thoroughly efficient state. Such, unhappily, was not the case. When the horses of the Brigades were hastily mustered they were found to be insufficient to meet the emergency; and it was only by dismounting Dyneley's (D) Troop and by wresting 32 horses from the Rocket Troop that the three Brigades and the Ball-Cartridge Division were enabled to start,<sup>1</sup> followed by the blessings of the Horse Artillery at Woolwich.

On landing it was found that the guns and waggons were under-horsed, and Colonel Smith proposed to raise the gun teams to 8 horses and the waggon teams to 6, by taking the horses required from the Ball-Cartridge Division and buying country horses for the latter and the unhorsed carriages. The General in Command, Sir William Clinton, sanctioned this proposal, 13th January 1827;<sup>2</sup> but when the matter was reported home, the Duke of Wellington recalled Colonel Smith, and appointed Colonel Sir John May in his place.<sup>3</sup>

<sup>1</sup> Letter of Sir A. Dickson, 5th September 1827, in Letter Book 1818-37; and Journal for 13th December 1826.

<sup>2</sup> W.O. 55 in Public Record Office.  
1339

<sup>3</sup> Sir John May embarked with Captain A. MacLachlan, Lieutenant F. L. Edridge, and a reinforcement of 60 gunners. They were shipwrecked on the 2nd March at Vianna, on the coast of Spain, and only escaped with their lives. Immediately after joining, Sir John's spur caught in a carpet and he fell down a steep flight of stairs; and hardly had he recovered from this accident when his horse reared and fell back with him. He was not seriously hurt.



The enormity of Smith's offence lay, of course, in the circumstance that "the detail of the force had been minutely examined and even settled by the Master-General himself."<sup>1</sup>

While awaiting the arrival of Sir John, Colonel Smith found the state of the Artillery to be far from satisfactory. The Cavalry Farriers had a contract for their shoes and nails; but these articles were issued from the Ordnance stores for the Artillery, and the shoes were of such a "monstrous size" that they had all to be reduced to fit the horses. This reduction had to be carried out in a field-forge, and involved an extraordinary amount of unnecessary labour. The nails were so bad that "there was no end of re-shoeing going on, and on the return of the Batteries from drill, or even watering order, a dozen horses or more required the services of the (solitary) shoeing-smith in each Battery." The result was that a number of horses went lame from constant shoeing and re-shoeing. Nor was this all; for from time to time fatigue parties of the already overworked gunners had to

<sup>1</sup> Letter from Lord Fitzroy Somerset to Sir A. Dickson, 30th January 1827. The Duke had been appointed Master-General on the 1st January 1819, and was quite aware that he was disliked by the Artillery. On the 25th December 1818 he wrote to Lady Charlotte Greville: "I hear that the Department in London, as well as the Officers at Woolwich, are very much alarmed at my appointment. I understand that some wag stuck up a bulletin in a sort of coffee-house they have there the morning after they heard of it, stating, 'The Field Officers and Captains, after passing a very restless and uncomfortable night, are as well as can be expected this morning'" (Lord Ellesmere's "Reminiscences of the Duke of Wellington," p. 114).

scour the drill ground in search of broken nails and shoes. At this time the gun detachments could only muster five or six men each, and "there were no men in reserve to replace the sick or the store guard."<sup>1</sup> Colonel Smith assembled a Board at Povos on the 12th March, which condemned the shoes and nails in strong terms.

The horses' harness was no better than their shoes. "Our harness," wrote the Adjutant to Sir A. Dickson, "is execrably bad, cracking in all directions."<sup>2</sup>

A few days after taking over the command, Sir John May reported to Sir William Clinton that a Board, assembled at Villa Franca on the 2nd April, had condemned the powder of 10,920 musket and 1930 carbine and pistol cartridges, and that it had been destroyed to prevent accidents.<sup>3</sup>

After eleven years of peace, at a time when annual practice was almost unknown, a short course

<sup>1</sup> From a MS. by the late Mr. Lazenby, who was Governor of the local jail when the present writer was quartered in Brecon, 1871-72. He was employed (as a civilian) in the Ordnance Store Department in Portugal, and acted as clerk to Colonel Smith. Most of his statements have been verified in the Public Record Office, and found scrupulously correct. The MS. was given to the R.A.I. by the present writer.

Sir A. Dickson speaks of these horse-shoes in his Journal, 11th May, 1827: "By some meddling stupidity of — and —, and ignorance on the part of —, a kind of contract was entered into with the Farrier Major to make 2000 horse-shoes for Portugal." The contract was, of course, irregular and illegal, as the Farrier Major well knew, and he made the shoes as best suited his own convenience.

<sup>2</sup> Letter, 22nd January, in Dickson Papers.

<sup>3</sup> W.O. 55 in Public Record Office.

of gun practice for the gunner-drivers might not have been superfluous ; but there was not a round of service ammunition allowed for the purpose, and the supply of blank cartridges was insufficient for field-days. These cartridges had to be subdivided, and to such an extent that at one of the field-days the force of the explosion was not sufficient to expel the tubes from the vent ; the tubes stuck fast—to the merriment of the other troops and the spectators—and the Batteries were sent back to barracks that the tubes might be extracted.<sup>1</sup>

The carriages were in perfect keeping with the rest of the equipment.

“The ammunition-boxes are very fragile,” wrote the Adjutant to Sir A. Dickson, Belem, 3rd February ; “three have been broken in merely moving them from the magazine.”

The English wheels, which had excited so much admiration at Paris in 1815, were now a laughing-stock to the Portuguese. “Our wheels are so rotten,” wrote the Adjutant on the 22nd January, “that two of Wylde’s went to pieces” at an ordinary field-day. “The wheels will very soon go to pieces when we move,” he added on the 3rd February. The tires were attached to the felloes by long nails, instead of bolts with nuts, and pieces of the tires were constantly flying off, especially when the Batteries moved at a trot.<sup>2</sup> The gun detachments

<sup>1</sup> Mr. Lazenby’s MS.

<sup>2</sup> The present ring tire was adopted from the Bengal Artillery at the time of the amalgamation. The streak tire used in 1827 was

had to be held responsible that these pieces were not lost. A searching examination of the wheels made at Belem, 8th August, showed that they were

TABLE L<sup>1</sup>

## LOCAL DISTRIBUTION OF THE REGIMENT, 1826

		Troops.	Com- panies.	Brigades.
Home Group . .	{ England . . .	5	25	5
	{ Scotland . . .	...	2	...
	{ Ireland . . .	2	4	4
	{ Channel Islands . .	...	2	...
	Total . . . . .	7	33	9
Mediterranean Group	{ Gibraltar . . .	...	5	...
	{ Malta . . .	...	2	...
	{ Ionian Islands . .	...	3	...
	Total . . . . .	...	10	...
Western Group . .	{ Canada . . .	...	5	...
	{ Halifax and New- foundland . . }	...	4	...
	{ Jamaica . . .	...	3	...
	{ Leeward Islands . .	...	4	...
	Total . . . . .	...	16	...
Southern Group . .	{ Cape of Good Hope . .	...	1	...
	{ Mauritius . . .	...	1	...
	{ Ceylon . . .	...	2	...
	Total . . . . .	...	4	...
	General Total . . .	7	63	9

originally old wheels which had been patched and tinkered in every conceivable way. It is uncertain

composed of six separate pieces called "streaks," each placed over the junction of two felloes and secured by four bolts with nuts and two nails. See the letters on the subject by Officers R.A. in India, "Occasional Papers, R.A. Institution," i. 146 ff.

<sup>1</sup> Millar, p. 20.

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how far Woolwich Arsenal was to blame for this state of things, or whether it was to blame at all. In those days the Arsenal was kept upon Lenten diet.<sup>1</sup>

From a military point of view the expedition to Portugal is worthless : as an illustration of the consequences of excessive and injudicious retrenchment it is invaluable. The Batteries which were the admiration of the world in 1815, were unfit for even a field-day in 1826.

<sup>1</sup> The following figures (Porter's "Progress of the Nation," p. 514) show the reductions in the Ordnance Office itself :—

Year.	Persons Employed.	Salaries.
1815	1,907	£281,302
1835	996	£159,128
Diff.	911	£122,174

## CHAPTER III

### THE DRIVER CORPS

DURING the course of the reductions described in the last chapter a great change took place in the circumstances of the Regiment—the Driver Corps was abolished and replaced by the gunner-driver system. How came the Brigades—and in a slight degree the Horse Artillery—to be dependent upon an alien corps of drivers for their means of draught?<sup>1</sup> To find an answer to this question we must look back for a moment to the middle of the eighteenth century.

The driver question vexed the souls of all Artilleries for a very long period. The cannon lost at Fontenoy, says the *Gazette* of the 11th May, 1745, "were left behind for want of horses, the contractors with the Artillery having run off with them so early that they reached Brussels that day." At Prestonpans in the same year we lost our guns in precisely the same way. Of the seven guns captured by the Highlanders the following year at the battle of Falkirk, "not one would have been lost," says General Wolfe, who was present, "had

<sup>1</sup> Major Charles James's legend that Colonel Hopkinson, 15th Hussars, was the originator of the Driver Corps is not worth investigating ("Regimental Companion," 1811).

not the drivers run off with the horses.”<sup>1</sup> Nor were we the only sufferers in this way. At Zorn-dorf, 1758, the conduct of the Prussian drivers was so bad that Frederick the Great posted Cavalry Officers to the Artillery teams to keep the drivers in order.<sup>2</sup> The simple and palpable remedy was pointed out at the time in the *Annual Register*. The drivers, said the writer, “ought to be enlisted under the military oath.”<sup>3</sup> His advice, however, was received as good advice generally is. In 1793 the gun-carriages and wag-gons of our army in Flanders were of a very faulty construction, and the drivers “were either hired men or men borrowed from the Infantry. . . . The carriages were of single draught, and the drivers were in consequence on foot, having generally three horses to each driver. . . . At this time the British Artillery had the mortification of seeing the English waggons, which were furnished to the Hanoverian Artillery, drawn by four horses and driven by two drivers mounted. During the campaign of 1793, many necessary improvements were suggested and reported to the department at home; but their adoption having been refused, the Artillery took the field in 1794, little otherwise benefited by the preceding campaign than by the knowledge of its own defects. . . . Although the remedies to these

<sup>1</sup> Wright's “Life of General Wolfe.”

<sup>2</sup> Troschke's *Die Beziehungen Friedrich des Grossen zu seiner Artillerie*, p. 33.

<sup>3</sup> xvi. 28.

defects were simple and obvious, yet we find, even in the home encampment near Swinley, in the year 1800, the system was not abandoned. . . . By this time the superior efficiency of the Horse Artillery, from having its Officers, men and horses regularly appointed and constantly attached to the same guns, became apparent; and the reflective part of the corps could not but hope that a system so obvious to reason and so demonstrably proved by practice, would be generally adopted in the Field Artillery. . . . Yet no organised bodies of Field Artillery were formed.”<sup>1</sup> Eventually, however, the Board of Ordnance took action, and in 1794 ordered the enlistment of a body of drivers, not as an integral part of the Regiment, but as an auxiliary corps under its own officers.<sup>2</sup> In a word, a fifth wheel was added to the coach, with all the unnecessary friction, correspondence, delay and vexation it entails. In addition to these general evils there were two specific evils—divided command, and great, and for the most part unnecessary, expense.

A and B Troops had been raised in January, 1793. The drivers were enlisted from the first in the Horse Brigade, and the system worked admirably. Why was not the same system adopted for

<sup>1</sup> Frazer, p. 50.

<sup>2</sup> Royal Warrant, 9th September, 1794, for raising a “Corps of Captain Commissaries and Drivers,” at an annual outlay of £61,702. Colonel Dalton, R.A., “Notes on the Corps of R.A. Drivers,” in “Proceedings, R.A.I.,” xxviii. 319. At the close of the year 1794, there were 224 men of the corps in Flanders.



the Brigades in 1794? The explanation given by the Committee of Revision,<sup>1</sup> 1819, is as follows :—

“It is considered, from the nature of the service to which Companies of Artillery in the British service are liable, and the consequent varieties of manner in which foreign field commands are subject to be called together, more especially on occasions requiring secrecy and despatch, that a Company of Artillery and the Division of drivers, which, when called together, form one constituted body attached to a Field Battery,<sup>2</sup> must in some measure be kept in distinct interior formation : more especially as they are both liable to separation on emergencies of service, as for sieges on the one hand, and on the other for reserves of ammunition, for pontoons, &c. ; and that therefore the equipment of a Field Battery will take a few more N.-C. Officers and soldiers than it might require if formed in one body constantly acting together, as in the service of most of the continental Powers of Europe, or in the Horse Artillery in our own, where the duties of each class are in a great measure reciprocal.”

<sup>1</sup> Lefroy, p. 184. The president, General Sir A. Farrington, Bart., R.A., was commissioned the year before the Seven Years' War began, 1755. Although seventy-nine years of age in 1819, he retained the use of all his faculties. It was at his suggestion that the Duke of Wellington assembled the Committee.

<sup>2</sup> This is perhaps the first use of this phrase in an official document. It is used in Sir A. Dickson's order of 25th April, 1827, to be quoted further on. The word “Brigade” will still be used here, lest an unwary reader may confound these bodies with the present Field Batteries, organised in 1859.

If confusion of style means confusion of thought, as Mr. J. S. Mill maintained, the unknown writer's ideas were in considerable disorder. Eliminating as best we can the superfluous matter, two reasons remain for not enlisting drivers in the Foot Artillery: (a) The superiority of the duplex system in cases requiring secrecy and despatch; and (b) the greater ease with which gunners could be detached to aid in a siege and drivers to draw pontoons, &c.

(a) To realise the situation we have only to suppose a Company, R.A., Pembroke Dock; a mounted body of the Army Service Corps, Aldershot, under one of their own Officers; and an Officer of the Ordnance Corps, Woolwich, with the whole equipment of a Field Battery—guns, carriages, ammunition, and stores—suddenly ordered to meet at Portsmouth on a certain day, to embark for active service as a "Brigade" of Artillery. It will occur to most readers that a modern Field Battery could reach Portsmouth with as much "secrecy and despatch," and in an infinitely more efficient state. Sir A. Frazer's description of the scene which actually took place at the embarkation of the Brigades has been given in Chapter I.

(b) The difficulty of hurrying off the gunners of a properly organised Field Battery to help hard-pressed Garrison gunners is purely imaginary. In 1793-94 the drivers of the Brigades "were either hired men or men borrowed from the Infantry."<sup>1</sup> If the Infantry could lend a hand to help the

<sup>1</sup> Frazer, p. 50.

Brigades, surely one branch of the Artillery could assist another. As to pontoons, the posting of Captain Cairnes's horses to the Pontoon Train in 1813<sup>1</sup> would have been just as feasible had the drivers been his own, enlisted in the 10th Battalion.

It is impossible that reasons so unsound could have satisfied the originators of the Driver Corps<sup>2</sup> had not their minds been unconsciously swayed by other influences, some of which are sufficiently clear.

The first was the immemorial custom of disbanding the Field Train at the end of a war. That it was a bad custom, entailing many bad consequences, is beside the question: as a matter of fact it was the invariable custom, and it must have influenced the inventors more or less. The Driver Corps lent itself to this course. The drivers could be withdrawn without difficulty, the guns handed over to the store-keeper, and the gunners marched to their Battalion when peace was restored.

Secondly, the plan of putting the means of draught of a Brigade under a Lieutenant-Commissary may have been suggested by the organisation of Frederick the Great's first Troop, in which the

<sup>1</sup> Duncan, ii. 382.

<sup>2</sup> In all probability Captain (General) R. Douglas and Captain (General Sir J.) Macleod. Sir A. Frazer, commissioned 18th September, 1793, and Sir A. Dickson, commanding 9th November, 1794, were not concerned in the matter.

drivers and horses were entrusted to the care of a Commissary of Horse.<sup>1</sup>

Thirdly, when the driver question arose in France about the same time, it was openly said by French officers that to give military *status* to "waggoners" was to degrade the name of soldier—*ravaler le soldat*<sup>2</sup>—an opinion to which the First Consul turned a deaf ear. If the Board shared this opinion at all, it would dispose them to enlist the drivers—since enlisted they must be—in a separate corps of their own, rather than among the soldiers.

Fourthly, a theory of Artillery organisation, which had just sprung up and was generally received, exercised considerable influence on the inventors of the Driver Corps.

On the introduction of Horse Artillery, the phrase "Foot Artillery" came into use to denote "the rest of the Artillery." It was a short, convenient phrase, and no objection would have ever been made to it had it been taken for no more than it was worth—a mere label. But as time rolled on a notion sprang up that this rough-and-ready phrase indicated the primary and essential division of the Arm. It was assumed on the mere authority of this label, without inquiry or examina-

<sup>1</sup> General von Strotha, *Die königliche preussische reitende Artillerie vom 1759 bis 1816*, pp. 1-3, 577-599. He describes the Commissaries as *halbinvalide Trunkenbolde*, and the drivers as *die Proletarier des Heeres*.

<sup>2</sup> General Lespinasse, *Essai sur l'organisation de l'Arme de l'Artillerie*. Paris, 1800, p. 111. Written by order of Napoleon.

tion, that the Artillery service naturally resolves itself into two distinct and separate branches, Horse and Foot, as a mixture of oil and water, if allowed to settle, resolves itself into two distinct strata of oil and water; and that any portion of the Arm which does not belong to the one branch belongs necessarily to the other. As this theory was first enunciated by the party afterwards led by Major C. von Decker of the Prussian Horse Artillery, it will be called here, for shortness, Decker's theory.

The origin of this theory was probably the old phrase applied to armies of Infantry and Cavalry, "Horse and Foot." If so, the analogy is false. In the old phrase, "horse" meant men who marched and fought on horseback, and "foot" meant men who marched and fought on foot. For the Artillery the case is different. The gunners of the Horse Artillery march on horseback, it is true, while the gunners of the rest of the Field Artillery march on foot;<sup>1</sup> but all gunners, horse as well as foot, must fight their guns on foot.<sup>2</sup> The phrase "Horse and Foot," therefore, is only applicable to Artillery when in motion—when marching and manœuvring with an Army in the field. But a large part of the Artillery neither march nor manœuvre with an army in the field, the Garrison and Siege Artillery.

<sup>1</sup> The transport of the Field Battery gunners on the carriages is ignored above to avoid complicating the matter.

<sup>2</sup> "The Horse Artillery . . . though mounted for the mere sake of expeditious movement, are neither more nor less than other artillerymen the moment the guns are brought into action" (Frazer, p. 37).

"Horse and Foot" consequently indicates a division, not of the whole Arm, but of only a portion of it, namely, of the Field Artillery; and Decker's principle was a pure fiction. The disastrous effects it produced wherever it was adopted will be shown in Chapters IV., V., and VI.

Extravagant arguments were, of course, necessary to bolster up this fiction. Monhaupt, in speaking of the Field Batteries, went so far as to say: "Das Element der Fussartillerie ist der Stand, das der reitenden die Bewegung"<sup>1</sup> (the basis of Foot Artillery is rest, that of the Horse Artillery motion). Others pleaded more plausibly, but not more reasonably, that the Brigades were branches of the Garrison Artillery because their gunners came from the Garrison Artillery. The stones of St. Paul's came from the Portland quarries, but the form of the Cathedral and the use it is put to have no conceivable connection with this fact. The nature of the Brigades had no more connection with the origin of their gunners. Whether they came from the Garrison Artillery or the Royal Marines, the Brigades were Field Artillery, bodies of mobile Artillery with their means of draught. The origin of the discussion is not doubtful; it was an insane fear that the Field Batteries were, or might become, the rivals of the Horse Artillery.<sup>2</sup> If properly equipped,

<sup>1</sup> *Ueber reitende Artillerie; was sic ist, &c. &c.* Leipzig, 1818, p. 13. By *Fussartillerie* Monhaupt meant "Field Batteries."

<sup>2</sup> This is quite clear from numerous passages in Decker's writings; for instance, pp. 161-162 of his *Geschichte des Geschützwesens* &c. It is manifest from the very title of Dwyer's brochure, *Die fahrende*

the Field Batteries can no more rival the Horse Artillery in mobility than the latter can rival the former in gun-power.<sup>1</sup> A Field Battery which can manœuvre at a gallop, except once in a way for a short distance, has too light an equipment. In other words, gun-power is lost and the Battery ought to be armed with more powerful guns.

Whether Decker was aware or not that all systematic classification is based on certain fixed principles it is impossible to say ; but certain it is that he made no attempt to apply these principles, and the natural consequence was that he fell into serious error. The method of classification is indicated in Appendix A.

We can now conjecture the situation in 1794. To enlist drivers in the Battalions for the Brigades seemed to the Board of Ordnance a perilous experiment. It was no less than to raise a novel and permanent body of Artillery in defiance of Decker's theory, and the Board had no mind to play the part of Frankenstein. It was easy to create the monster, but how could they rid themselves of him? The species, too, of these strange Batteries was doubtful. It was certain they would not be Horse Artillery, but it was far from certain that they would be Garrison

*Artillerie kann nie die reitende ersetzen* ("The Field Batteries can never supplant the Horse Artillery"). It was hardly worth while writing a tract to prove a proposition which no Artilleryman of common sense ever questioned.

<sup>1</sup> "The necessary quick movements of the Horse Artillery cannot be attained by 9-prs. ; the telling effect of 9-prs. cannot be expected from the Horse Artillery" (Gardiner (*a*), p. 34).

Artillery. The best way out of the difficulty, thought the Board, was to follow the advice given by the *Annual Register* in 1745 to enlist the drivers, but to keep them as distinct from the Regiment as the contract drivers had been. In this way the good old plan of forming the Brigades might be followed. The gunners would come from the "Marching Battalions"<sup>1</sup> when war broke out, and return to them when peace was made. Such Brigades would surely be Garrison Artillery, and there would be only two Artilleries, horse and foot. By some such train of ideas the Board reached the decision to form the Driver Corps, and if examined through eighteenth-century glasses the course they took is at least intelligible. A clear view of Field Artillery had not yet been obtained; its nature, organisation and limits had not been discussed and reduced to principles; its very name was still in embryo. The father of modern Artillery literature does not use the phrase "*Artillerie de campagne*"; —Captain Dupuget of the French Artillery, whose excellent *Essai sur l'Usage de l'Artillerie* was published in Amsterdam in 1771. Under such circumstances it is not wonderful that a Board, composed of men of very ordinary intelligence, failed to perceive the necessity for a permanent body of Field Batteries; clung fondly to the transient Brigades they were familiar with, and believed in a pure state of Horse and Foot Artil-

<sup>1</sup> So the Garrison Artillery are travestied in the Army Lists of the time. *Lucus a non lucendo*.



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lery. They did not realise that this consummation could be only reached in time of peace, and then only by suppressing seven-tenths of the Field Artillery,<sup>1</sup> with disastrous results to the Brigades.

The Officers of drivers received Cavalry pay : the Officers of Artillery received Infantry pay.<sup>2</sup> Yet the latter were only provided with horses by the Driver Corps, and "were required to appear on parade with their saddles and bridles. It will not be supposed that the horses selected on these occasions were the best trained ; and the Officers in consequence have sometimes found themselves in situations rather of ridicule than of capacity of attention to their duty, and always in the mortifying one of being worse mounted than the Officer, or even N.-C. Officer of drivers."<sup>3</sup> One consequence

<sup>1</sup> The figures are those of the Committee of Revision, 1819 ; 3 Troops and 7 Brigades to an army of 30,000 men. These were the proportions of the Army of Occupation—Tables D and E..

<sup>2</sup> Daily pay, Captains and Subalterns (under seven years' service) :—

	Dragoon Guards and Dragoons.	Horse Artillery.	Foot Artillery.	Infantry.	Driver Corps.
Captains . .	<i>s. d.</i> 14 7	<i>s. d.</i> 16 1	<i>s. d.</i> 11 1	<i>s. d.</i> 10 6	<i>s. d.</i> 15 0
Lieutenants .	9 0	9 10	6 10	6 6	9 10

(From the Army List, 1820.)

<sup>3</sup> Frazer, p. 98.

of this state of things was, that while the Captain-Commissaries and senior Officers of drivers were only honorary members of the R.A. Mess, the junior Officers were excluded altogether.<sup>1</sup>

In 1797 the Corps consisted of 5 Troops, each Troop of 275 of all ranks;<sup>2</sup> but its strength was altogether unequal to the manifold duties it was called on to perform. In the year 1798, as Quarter-master Tate relates, the Commandant of Woolwich inspected a Battery manned by gunners of the 8th Battalion. The guns were each drawn by three horses in single file, driven by contract drivers on foot who had been hired for the occasion. These men were dressed in white smocks with blue collars and cuffs, and carried long carters' whips of the ordinary farm pattern. When this imposing procession had filed off, the Commandant, General Lloyd, and the Garrison Adjutant, Captain Spearman, concurred in the opinion that Field Artillery movements could not be performed quicker.<sup>3</sup>

On the 17th September, 1801, the Corps was renamed the "Corps of Gunner Drivers," and on the 3rd January, 1806, it became the "Corps of Royal Artillery Drivers," consisting of 11 Troops, of which 1 Troop of 62 drivers served as a Riding Establishment at Woolwich. This Troop was separated from the rest in 1808 and became the

<sup>1</sup> Dalton, "Proceedings R.A.I.," xxviii. 326.

<sup>2</sup> Frazer, p. 71.

<sup>3</sup> "Aide-Mémoire to the Military Sciences," article "Ordnance."

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independent Riding Establishment. The following table gives the establishment of a Troop in 1806 :—

TABLE M  
ESTABLISHMENT OF A TROOP OF DRIVERS, 1806<sup>1</sup>

Captain Commissaries.	1st Lieut. Commissaries.	2nd Lieut. Commissaries.	Staff Sergeants.	Sergeants.	1st Corporals.	2nd Corporals.	Rough Riders.	Trumpeters.	Farriers.	Shoeing-Smiths.	Collar-makers.	Wheelers.	Drivers.	Total.
1	5	1	5	15	15	15	2	5	5	15	10	10	450	554

The whole Corps was commanded from 1795 to 1817 by Colonel Robert Douglas, R.A.

The Corps reached its culminating point in 1814, with a strength of 88 officers and 7352 men.<sup>2</sup> In 1815 its strength was 16 per cent. less, 1207 drivers having been reduced during the interval between the end of the Peninsular War and the Hundred Days; and in 1816 came the beginning of the end. From the moment the appointment of a Select Committee on Naval and Military Expenditure was mooted, the fate of the Officers of Drivers, at least, was sealed. The Committee could not fail to discover, as the Board of Ordnance knew full well, that had the drivers been enlisted in the

<sup>1</sup> Dupin, i. 259.

<sup>2</sup> Lefroy, p. 175.

Battalions, which nothing forbade but a German fiction, the Treasury might have saved the pay of the whole Driver Officers for twenty-two years—some £360,000—and their retired pay, full or half, for the remainder of their lives, a sum which cannot now be estimated. As a matter of course, then, the Driver Officers were put on half-pay in 1817, and the drivers, 1461 in number,<sup>1</sup> were placed under the command of the Officers of the 4 Troops reduced in 1816, D, K, L, and M.<sup>2</sup> From this time the drivers continued to dwindle in numbers until the 1st January, 1822, when the remnant, 288 drivers with 360 horses, were absorbed by the regiment and the corps of Royal Artillery Drivers ceased to exist.

The method pursued in disbanding the Corps and in providing a substitute for it will be described in the following chapter.

The almost general bad conduct of these men had been the subject of constant complaint by Artillery Officers since the creation of the Corps. To them Captain Adam Wall, 7th Battalion,<sup>3</sup> attributes most of the disorders that occurred during the retreat to Corunna. "I found (the drivers) a constant care; plunder was more their object than their duty, and I am convinced that the irregularities spoken of by Sir John Moore were committed by the drivers of the different Brigades. At least

<sup>1</sup> Lefroy, p. 170.

<sup>2</sup> G. O., 4th July, 1816. The Order was published in anticipation, as it took some time to remove the Driver Officers.

<sup>3</sup> His Company eventually became the present 9th Field Battery.

I can declare that my drivers contributed in a great measure, and I cannot help wishing that this scourge of the army was no more." So wrote the angry and shoeless Captain Wall, amid the storms and snows of Galicia;<sup>1</sup> but in the calm of after-years Sir Augustus Frazer and Captain Heron, while admitting the excesses of the drivers, agree that they sprang rather from a radically bad organisation than from any peculiar depravity of driver nature. They had Officers of their own, says the former, "who from the nature of the service were seldom, if ever, with their men, and between whom and the drivers no bond of union did or could exist. Hence a total want of attention to the accompts, the comforts, and the well-being of the drivers."<sup>2</sup> "They were miserably neglected," says the latter. "Their officers were not well selected, and the mode of distributing the force exposed the drivers to the most gross frauds in the settlement of their accompts and other evils, which called loudly for alteration."<sup>3</sup> But when we consider the bad conduct of the drivers, however caused, together with the correspondence and delay, the divided command and friction, produced by the system, we can understand why the dissolution

<sup>1</sup> "December 31, 1808. The mountains covered with snow and the weather extremely cold. Our troops began to drop as we marched along, and thousands were left to die in the snow, or fall into the hands of the enemy. . . . The constant marching frequently reduced us to bare feet, and at one time both Officers and men were in this situation" ("Diary of the Operations in Spain," "Proceedings, R.A.I.," xiv.).

<sup>2</sup> Page 72.

<sup>3</sup> Page 33.

of the Corps gave "universal satisfaction"<sup>1</sup> to the Officers of the Regiment. They little thought, in the midst of their rejoicing, that a worse thing might come unto them.

<sup>1</sup> Heron, p. 33. The above remarks apply in no way, of course, to our present drivers—the hardest-worked and not the least-deserving soldiers in the army.

## CHAPTER IV

### THE GUNNER-DRIVER SYSTEM

WE saw in the last chapter how the opportunity of organising the Regiment on sound principles was lost in 1794. When the Driver Corps was disbanded in 1822, another opportunity presented itself, and it remains to show how the Board of Ordnance availed themselves of it.

It may be said at once that one inevitable condition was attached to any and every scheme that might be proposed to replace the Driver Corps—it must cost nothing. Select Commissioners on Army expenditure were prowling within the precincts of the Ordnance Office, and the finances of the Board in 1822 fell to the lowest point they had reached between the beginning of the century and the battle of the Alma.

TABLE N<sup>1</sup>

ORDNANCE EXPENDITURE, 1806-1849

1806. . . £5,250,376	1822. . . £1,007,821	1838. . . £1,384,681
1810. . . £4,808,745	1826. . . £1,869,606	1842. . . £2,174,673
1814. . . £4,302,893	1830. . . £1,613,908	1846. . . £2,361,534
1818. . . £1,247,197	1834. . . £1,068,223	1849. . . £2,332,031

<sup>1</sup> Porter, "Progress of the Nation," pp. 505-506.

At this moment the materials for a sound organisation lay at the doors of the Ordnance Office—288 drivers and 360 horses, the remnant of the Driver Corps. There were 40 Companies in the British Isles and 32 abroad; so that, with very little derangement of the roster for foreign service, a permanent Battalion might have been formed of 8 Field Batteries, with 45 horses and 36 drivers each, without adding a penny to the Estimates. But this and all similar plans of organising the Field Batteries on some fixed and reasonable principle were rendered impossible by the circumstances about to be related.

Up to the 16th May, 1821, no suspicion seems to have been felt at the Ordnance that Mr. Joseph Hume, M.P., and the party of retrenchment would push matters so far as to necessitate the total extinction of the Driver Corps. On this date Sir Alexander Dickson explained to the Surveyor-General that the reduced Driver Corps would "serve as a nucleus to form an increased Driver Corps in case of an emergency."<sup>1</sup> But the circumstances changed within two months, for Sir Alexander records on the 7th July that "the Duke (of Wellington, the Master-General) was anxious to break up the Driver Corps for economy, and because it was in a bad state."<sup>2</sup> On the 10th July,

<sup>1</sup> "Journal," 16th May, 1821.

<sup>2</sup> *Ibid.*, 7th July. "During the sessions of 1821-22, the government was driven, by pronounced expressions of public opinion, to make immense reductions of expenditure" ("Cambridge History," x. 583). The actual reductions in expenditure were, for the Ordnance £175,906, and for the Army £1,439,871.



Sir Alexander was sent for, and tells us that the Duke's plan "is to divide the Driver Corps among the Battalions, and to have a proportion of drivers in each Company. . . . I pointed out the necessity there would be to regulate about horses, artificers, &c., . . . and the conversation concluded by determining that this arrangement should be carried into effect." On the 12th September, Sir Alexander again saw the Duke, who "proceeded to draw up a preliminary arrangement for reducing the Driver Corps and uniting it with the Marching Battalions." The Duke approved of some (unknown) recommendations made to him by Sir Alexander about the drivers on the 15th September, and the general principles laid down were then forwarded to Sir John Macleod, the Deputy Adjutant-General, to be worked out and put in Orders.

The Orders in question appeared on the 28th September. It was directed that in future every recruit for the Foot Artillery should be enlisted as a "gunner and driver." To equip the Headquarters of Battalions for their dual duties, there were attached to each—

One Farrier.  
„ Shoeing-smith.  
„ Collar-maker.  
„ Wheeler.

Since every gunner was now (nominally) a driver also, whether in the casemates at Dover or the

galleries at Gibraltar,<sup>1</sup> it became necessary to diffuse a knowledge of stable management and driving throughout the Battalions; and with this object the 288 (real) drivers and their 360 horses were dispersed through the 72 Companies, 4 drivers and 5 horses being posted to each Company. It was further ordered that in every Company one man should be trained as a shoeing-smith, one man as a collar-maker and one drummer as a trumpeter. The Order continues: "The (real) drivers belonging to the whole Regiment must remain at the Headquarters of the several Battalions at Woolwich . . . till a sufficient number of the drivers of the Companies . . . shall be trained to take charge of the horses. . . . The Commanding Officer of the several Battalions will decide to what service the several men are to be trained; but it will be expected that one half of the establishment of each Company shall be trained to the care and management of horses, as well as to the service of the Artillery."

It will be remembered that the Duke of Wellington, when Master-General, had a seat in the Cabinet. He had consequently much important business to transact in addition to the Ordnance, which included the Artillery, Engineers, Barrack Department and Store Department, and he had frequently to go

<sup>1</sup> In the Distribution List published in the *Naval and Military Gazette*, 6th February, 1841, 6/9th Battalion at Gibraltar, 3/8th Battalion at Malta, and 4/3rd Battalion at St. Helena are shown as Field Batteries.

abroad for one purpose or another. On 1st October, 1821, he accompanied the King over the field of Waterloo, and during the same tour he inspected the fortresses of the Netherlands, and visited King Louis XVIII. in Paris. When his attention was called to the foregoing Order on his return home, Sir A. Dickson was instantly sent for. On reaching the Ordnance Office on the 21st December, 1821, he relates in his "Journal": "Lord Fitzroy Somerset (the Lord Raglan of the Crimean War) told me the Duke wished to see me on the subject of General Macleod's arrangements for carrying the driver plan into execution, as he could make neither head nor tail of it." On being admitted to the Duke, "His Grace said that Sir John Macleod had entirely mistaken his meaning by breaking the drivers into small detachments . . . and he several times said, 'he always mistakes my meaning.' He also expatiated on . . . the necessity of the duty being done more in Battalions, to simplify the accounts in the Surveyor-General's office. . . . He then sat down and wrote an explanation respecting the drivers. . . . His plan generally was this:—

"One Company of each Battalion always to be kept at Woolwich for recruiting parties, &c. &c.

"In case a Company is sent to Ireland at any time, it is to be transferred to the Battalion serving in Ireland. . . . The drivers in Ireland are to be mustered 3, 6, 8, 10, or 12 drivers to each Company, as may be necessary, and the gunners in the Com-

pany to be proportionally diminished. In case this diminishes the number of the Artillerymen too much on the Irish establishment, the Duke has no objection to send another Company there. In short, he won't allow the drivers to be detached. They must absolutely be mustered with the Companies they serve with, and the Companies on foreign service will be without drivers. Lord Fitzroy came in (at this moment) to say that General Macleod was there to see the Duke on the very subject he was writing about, and his Grace said, 'It is very little use my seeing him, for he neither understands me nor I him.'"

The only result of this final conference on the matter was a supplementary Order, 28th December, 1821, in which it was laid down that a Subaltern of each Battalion was to be appointed weekly, by Battalion Roster, to superintend the drivers and horses, and perform stable duty. A Captain of each Battalion was to inspect and make a weekly report to his Commanding Officer. And so on.

Nature had not fitted the great Duke to be Master-General. Some of the very qualities which contributed to his splendid and unbroken success in the field—a rapid glance, prompt decision, and an iron will—were fatal to success in the Ordnance Office. The prolonged discussions necessary to determine a proper basis for the organisation of a complicated Arm like the Artillery, were unbearable by a man who brooked no discussion. The endless experiments of the Ordnance Committee were intoler-

able to a man of quick decision. It was impossible for the Duke to have any knowledge of the inner working of the Regiment. His life was a very busy one;<sup>1</sup> his attention was constantly absorbed in politics, or in matters connected with the Army as a whole; and he never had the leisure to consider specific Artillery questions.<sup>2</sup> No one knew better than he how Batteries ought to move, take up positions, and conduct their fire; but a man may wear and make use of a watch all his lifetime without possessing a full and clear knowledge of the principles of its construction. To modify in any way the organisation of the Regiment, as he proposed, for the convenience of the Surveyor-General's clerks was preposterous. The office was made for the Artillery, not the Artillery for the office. To transfer the Companies which went successively to Ireland to the Battalion in Ireland was as impracticable as to transfer to home Companies the drivers of Companies proceeding abroad. The result in both cases would have been unending confusion and the destruction of all *esprit de compagnie*.

The misunderstanding between the Duke and Sir John Macleod arose apparently from the

<sup>1</sup> "Rest!" said the Duke to Lord Stanhope. "Every other animal, even a costermonger's donkey, is allowed some rest, but the Duke of Wellington never!" ("Conversations, &c.," p. 194).

<sup>2</sup> Entries such as the following are occasionally met with in Dickson's "Journal": "15th September, 1821. The Duke won't approve of the proposed arrangement for fuzes. He does not clearly understand it."

ambiguity of the word "driver," which may either mean "any man who drives," or "a man of low stature and light weight specially enlisted to drive." It would be idle to discuss the rights and wrongs of the matter now, but one question still retains its interest: To whom does the Regiment owe the invention of the gunner-driver?

The gunner-driver system was not the handiwork of Sir John Macleod. He was mortified by the suppression of the Driver Corps, which he himself had introduced, and he viewed the new system with hardly-suppressed displeasure. So much so, that when he heard of the *fiasco* in Portugal, 1826, and of the bold steps taken by Colonel Webber Smith, "he was very near writing to him to express his satisfaction."<sup>1</sup> The creation of the gunner-driver, then, lies between the Duke and Sir Alexander Dickson, and what happened is tolerably clear. Sir Alexander knew perfectly well that, so long as (real) drivers were retained in the Foot Artillery, the scheme of organisation hurriedly outlined in writing by the Duke was impossible, and he also knew that successful opposition to the Duke's wishes was equally impossible. Great men at times can stick as obstinately to their errors as small men, and the Duke was as much infatuated with his false system of Artillery as Goethe was with his false theory of Colour, on which he never wearied of dilating. There was but one possible solution

<sup>1</sup> Dickson's "Journal," 2nd February, 1827.

of the difficulty created by the Duke, and Dickson, no doubt, privately advised the adoption of this solution—the enlistment of all Foot Artillerymen as gunners-and-drivers. This step once taken, Companies going abroad would take no drivers with them, for the driver Jekyll of yesterday would become the gunner Hyde of to-day. The diminution of the gunners in the Irish Companies, as the drivers increased, would be effected by a similar transformation. Such in brief was the origin of the gunner-driver system, for which the Duke was morally responsible.

As time went on the radical faults of the system became clearer and clearer. Shortly after its introduction Sir Alexander Dickson wrote an undated memorandum,<sup>1</sup> in which he objects to “the subdivision into nothing” of the drivers and horses, and shows the absurdity of the endeavour to instruct the whole Regiment in Field Artillery work—an attempt “impossible as it is unnecessary.” He points out the waste of money caused by an ill-instructed Field Artillery. “Neither Officers nor men of any Company are familiar with the care of horses and horse equipment, or practised and experienced in field duties to any extent. In fact, with the exception of Ireland and Manchester, there is no longer any Field Artillery in a state of equip-

<sup>1</sup> It begins, “Observations on the present state of the Field Artillery equipment, &c. &c.” It is dated in another handwriting, 1823, but the ink is so fresh that this date was apparently added since the Dickson papers came into the hands of the R.A.I.

ment belonging to the Empire"—apart from India. Consequently, "whenever an Army is required in the field, the want of all experience in the care of horses and equipment will . . . lead to a repetition of the same waste and destruction of horses as occurred in the Peninsula, and, in the event of a war commencing with an active campaign, to evils of incalculable magnitude. . . . The Brigades which took the field in the Peninsula were thrown together at Lisbon without drill, system, or preparation; the men having never seen their horses, or the Officers half of their men, till ordered to march. The consequence was that one set of horses was destroyed, and each Brigade was nearly *hors de combat* during the first six months." Such was the direct and necessary consequence of the Decker principle. He goes on to say: "Eight or ten Companies should be selected and appointed to Brigades . . . for three or four years each. The whole would in a short time become as efficient as the rest of the Army." This memorandum is unaddressed, and it is not certain that it was ever posted. If so, it produced no effect, except possibly the creation of a *depôt* of horses under Major R. Jones, in which, as Sir Alexander afterwards remarked, "the men merely acquired practice as grooms, without learning to drive."

The following was the state of the horses in 1825,<sup>1</sup> by which time the 5 horses and 4 (real)

<sup>1</sup> Sir A. Dickson, in the Memorandum written in reply to the Duke's Memorandum of 3rd September, which follows.



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drivers per Company had dwindled to 4 horses and 2 drivers :—

Woolwich, 26 Companies, 4 horses each . . .	104
„ Depôt . . . . .	72
Manchester, 1 Brigade . . . . .	27
Dublin, 2 Brigades . . . . .	52
Ballincollig, 1 Brigade . . . . .	26
Limerick, 1 Brigade . . . . .	26
Total . . . . .	307

This gives the strength of the Field Battery horses, not only in the British Isles, but in the British Empire—India alone excepted.

On the 3rd September of this year Sir Alexander received from Lord Fitzroy Somerset a Memorandum written by the Duke, in which his Grace observes that “the system would have flourished if the heads of the Artillery had taken pains with it.” The best efforts of the best Artillery Officers who ever lived could not have saved a system based on Decker’s principle, that Garrison Artillery and the Field Batteries are interchangeable.<sup>1</sup> The Duke goes on to say that the horses at Woolwich ought to be formed in 5 Brigades, each posted to a Battalion. By attaching a Company to each Brigade for three months, all the Companies of the 5 Battalions would be instructed in Field Artillery work in two years.

This extraordinary Memorandum forced back

<sup>1</sup> In July, 1825, Sir Alexander was reading one of Decker’s books in a French translation, *Traité élémentaire d’Artillerie* (“Journal,” 25th July).

Dickson from the position he had taken up in the "Observations" just quoted, but he continued his efforts to modify the Duke's theories and neutralise their worst effects. He feared, he said in reply,<sup>1</sup> that "three months would not be sufficient for exercise and manœuvres and to render the drivers expert in driving and in the care of horses. . . . The Duke's system is the best possible, but by taking his Grace's orders in a literal sense and not giving them a liberal interpretation . . . it is the general opinion that the system cannot succeed. . . . The Brigade establishment, when tardily got together, with any stray Company whose turn it may be, is unprepared to perform the duties required and totally unfit for any public exhibition. . . . The Companies ought to be attached for one or two years to Brigades." But before anything was done the Brigades had to take part in a public exhibition of a very different character from that contemplated by Sir Alexander—the expedition to Portugal, December, 1826, and their real condition was exposed to the light of day. In a letter to Sir Alexander, dated Villa Franca, 7th March, 1827, Col. Webber Smith, commanding Royal Artillery, says: "Some of the drivers have never been on horseback. They did not know how to put on their harness or hold the reins, and had no idea of cleaning

<sup>1</sup> There is some uncertainty about the exact date of Dickson's Memo. He tells Lord Fitzroy Somerset that he had not "changed its date," as he ought to have done. It was apparently 13th September.

horses." At a field-day in January, says Lieut. E. J. Bridges, Col. Smith's Adjutant, "some of the drivers were so bad that they nearly turtled off their horses when marching past."<sup>1</sup> At this parade, which was attended by all servants and grooms, the dismounted party of Capt. Wilgress' Brigade consisted of "2 Sergeants, 2 Corporals, and 4 Gunners."<sup>2</sup> He had 18 men in hospital from fever and ague. "To have marched would have been an impossibility—no spare horses, no spare men. . . . With our heavy (9-pounder) guns and miserable drivers we should have stuck in the mud," had a march been attempted. . . .<sup>3</sup> "The Officers have worked hard, but they are new to the work. . . . The gunner-driver system can never answer. . . . We have retrograded fifty years since the Peninsular War."<sup>4</sup> This state of things became a public scandal on the appearance in the *Morning Herald*, 6th June, 1827, of a letter signed, "R.A., Lisbon," openly denouncing the Duke of Wellington for having, from personal resentment, "purposely rendered the British Artillery Corps in Portugal unfit for any service" it might be called on to perform. Sir John May publicly answered this letter, denying that it was written by any Artillery Officer in Portugal.

<sup>1</sup> Letter to Sir A. Dickson, 22nd January, 1827. Bridges had been Sir A. Dickson's Adjutant in the Peninsula, and had now nineteen years' service. He was not aware that Sir Alexander was in any way connected with the gunner-driver system.

<sup>2</sup> *Ibid.*, 9th March.

<sup>3</sup> *Ibid.*, 22nd March.

<sup>4</sup> *Ibid.*, 16th February.

"I was never so annoyed in my life," Sir Alexander wrote on the receipt of the first news from Portugal, and he got no consolation from either his brother Officers or Officers outside the Regiment. Sir John Macleod, Sir Augustus Frazer, Sir Robert Gardiner, Sir John May, Colonel Drummond, Colonel Webber Smith, Major R. Jones, Lieutenant E. J. Bridges, and a host of others condemned the system. Sir Henry Hardinge told Dickson on the 8th February, 1827, that "the system would never answer," using the very phrase employed by Bridges in his letter written a week later in Portugal. In July Sir Alexander had to defend the gunner-driver against the new Master-General, Lord Anglesea,<sup>1</sup> and four years afterwards the then Master-General, Sir James Kempt, reminded him, to his "great annoyance," that many of the best Artillery Officers were opposed to the system.<sup>2</sup> But Sir Alexander stood by it to the last, and he told the Select Committee on Army Expenditure in 1838, two years before his death, that so long as he remained Deputy-Adjutant General he would maintain the system introduced by his Grace the Duke of Wellington.<sup>3</sup>

Sir John Macleod's forty-four years' tenure of office—twelve as Brigade-Major and thirty-two as Deputy-Adjutant General—came to a close at this

<sup>1</sup> "Journal," 20th July, 1827.

<sup>2</sup> *Ibid.*, 12th February, 1831.

<sup>3</sup> Lefroy, p. 175.

crisis,<sup>1</sup> and Sir Alexander Dickson, who succeeded him, hastened to prop the tottering house as best he could. With this object he issued the following Order on 25th April, 1827 :—

“In order to place the driver and the horse establishment at Woolwich in a more condensed and manageable form, to facilitate the instruction of Officers and men in Field Artillery duties, and to expedite the formation of an adequate number of drivers for home and foreign service, his Grace the Master-General has thought proper to order that there shall be formed three Field Batteries, and that the remainder of the horses shall be assembled as a Reserve and attached to one Battalion, with a due proportion of Officers and men, for the purpose of instruction in the care of horses and driving.

“The Companies attached to the Field Batteries are to remain posted to them for a period not exceeding one year, and the Officers and men attached to the Reserve are to be changed when found expert in horse and driving duties.”

This Order was followed by another two days afterwards :—

“The following Companies are to be attached to the three Field Batteries :—

Brevet-Major R. S. Douglas, 6th Battalion.

Captain W. D. Jones, 3rd Battalion.

Captain C. Gordon, 1st Battalion.

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<sup>1</sup> He was appointed Director-General of Artillery. Although seventy-five years of age at this time, he was not our oldest Deputy-Adjutant General, Sir Hew Ross having held the office until he was well advanced in his eightieth year.

“ Each Battery will consist of :—

4 guns . . . . .	16 horses
4 ammunition waggons . . . . .	16 „
3 N.-C. Officers and 1 Trumpeter . . . . .	4 „
Officers . . . . .	4 „
Spare . . . . .	5 „
<hr/>	
8 carriages	45 horses

“ The remaining horses will be mustered in the 9th Battalion, and will form the Reserve of instruction under Captain Bentham. Lieut.-Colonel Drummond, being charged with the superintendence of this service, will give the necessary orders, &c.”

There is a certain haziness about the functions of the Reserve in these Orders, but it is a matter of little importance. The Reserve worked badly from the first, and soon ceased to work at all—as a military body. The reason given by Sir J. Henry Lefroy, in strictly guarded language, is this, that “ the duties of fatigue and the public works, which were at first taken in turn by the Batteries, finally devolved entirely upon the Reserve, to which horses unfitted for more active duties were in general transferred.”<sup>1</sup> Sir Robert Gardiner speaks in plainer words: “ The Reserve Battery at Woolwich is never drilled—never appears on parade—but is employed constantly in carting work in the Arsenal. It is made up of cast-horses from the Horse Artillery and Brigades, and cannot be spoken of as Field Artillery.”<sup>2</sup>

<sup>1</sup> Lefroy, p. 174.

<sup>2</sup> (b), p. 14.

Sir Alexander Dickson's modifications of the organisation of 1821 were undoubtedly improvements, but the system had intrinsic and ineradicable faults.

First, it killed the greatest incentive to efficiency, *esprit de batterie*, the desire felt by Officers and men alike to make *their* Battery the best of all Batteries. What possible interest could be taken in one of the Woolwich School Batteries, which they were compelled to attend for a few months, by the Officers and men of a Company which was, perhaps, next on the roster for Barbadoes? It was not *their* Battery; it was somebody else's; and they took no pride in it. The feeling was much the same in the few Brigades at out-stations. The tenure of the Company, as a Brigade, was quite precarious, and men cannot and will not interest themselves in duties from which they may be removed at an hour's notice.

Secondly, one year's instruction was not long enough for the thorough instruction of even a permanent Field Battery, which always possesses more or less *esprit de batterie*. "The time required to perfect a Brigade in all its duties is at least eighteen months or two years,"<sup>1</sup> said Sir Robert Gardiner with perfect truth. A year, therefore, was much too short a time for the instruction of a Company which, however great its *esprit* as a Company, had none and could have none as a Brigade.

<sup>1</sup> (b), p. 20.

Thirdly, the instruction was not continuous, and therefore of very little use. Supposing that every Company got a clear year's instruction (which they never did), nine Companies would pass through the course in three years. But by the time Companies 7, 8, and 9 had finished their course, what would have been the value, as Field Batteries, of Companies 1, 2, and 3, which had rejoined the Garrison Artillery two years previously? Almost nothing.

Fourthly, it was impossible to obtain a body of men physically fit to become good drivers, especially wheel-drivers. The men were too heavy and too long in the leg. For example, in 1845 the height for Artillery recruits was 5 feet 8 inches; age, 18 to 22 years; bounty, £5, 15s. 6d.<sup>1</sup> The *minimum* height of a driver-gunner, therefore, was 5 feet 8 inches, and drivers of 5 feet 10 inches and 6 feet were not infrequently seen.<sup>2</sup> Sir Robert Gardiner put the matter in a nutshell when he said, "A man may be enlisted as a gunner and driver, but the same man *cannot* be fit for both duties."<sup>3</sup>

The gunner-driver bestrode the Regiment like the Old Man of the Sea for thirty-eight years, and was finally dislodged by an unforeseen event. "At the close of the Indian Mutiny it was decided to amalgamate the Indian with the Royal Artillery. This caused a permanent demand for

<sup>1</sup> See Recruiting Poster, Appendix C.

<sup>2</sup> Letters from General J. Desborough, C.B., Adjutant of the Woolwich Field Batteries, 1852-54, and from Captain T. Longworth Dames, late R.A., formerly on the recruiting service.

<sup>3</sup> (d), p. 32.



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a large number of Field Batteries for service in India, with a corresponding number at home to relieve them; and from that time the Field Batteries became permanent."<sup>1</sup> The gunners were, in consequence, relieved from their mounted duties in 1859, and their place was taken by a body of men physically fit for driving.

<sup>1</sup> MS. memorandum by Gen. Sir Robert Biddulph in the writer's possession.

## CHAPTER V

### THE REGIMENT, 1827-1846

THE guns of the two Troops in Ireland were raised from 2 to 4 in the year 1828 through the instrumentality of Mr. Daniel O'Connell. In this year Mr. Vesey Fitzgerald, M.P., whose seat for Clare was believed to be perfectly safe, was appointed President of the Board of Trade and was consequently obliged to seek re-election for his county. He was unexpectedly opposed by O'Connell, who was triumphantly elected; the country became convulsed by the question of Catholic Emancipation; and F and H Troops, then quartered in Ireland, were raised to 4 guns each.

Canada was in a state of rebellion in 1837 and five 4-gun Brigades of 6-prs., with 60 horses each, were raised under the command of Colonel F. Campbell, R.A.<sup>1</sup> Two of these Brigades were reduced in 1848, a third was reduced in 1852, and the remaining two disappeared in 1854.

During this period the Regiment lost two of its ablest officers, Sir Augustus Frazer, who died in 1835, aged fifty-nine years, and Sir Alexander Dickson, who died in 1840, aged sixty-three years.

<sup>1</sup> "Select Committee on Army and Ordnance Expenditure, 1848," Q. 7775, *et seq.*

The services of Sir Alexander, who as a regimental Captain commanded the Artillery during the latter years of the Peninsular War, are too well known to require any notice here. Sir Augustus Frazer was described by one who knew him well, the late General P. Sandilands, R.A., as "an admirable and complete gunner."<sup>1</sup> This estimate is fully borne out by Frazer's services in the field and by his two books, "Letters during the Peninsular and Waterloo Campaigns," and the "Remarks, &c.," so often quoted in these pages. His prevailing upon the Duke of Wellington before Waterloo to change the armament part of the Horse Artillery was not the least of his services. The Duke had 10 Troops, 8 British and 2 King's German Legion, which, under ordinary circumstances, would have meant 60 light pieces of Ordnance (6-prs. and 12-pr. Howrs.). Owing to Frazer's intervention, their actual armament was 40 heavy pieces (9-prs. and 24-pr. Howrs.) and 20 6-prs., those of 4 British Troops."<sup>2</sup>

The Regiment showed little signs of vitality during these gloomy years, 1827-46, stunned by the successive reductions of 1816-23. In the 'thirties two foreign Officers visited this country and recorded their impressions; Lieutenant G. A. Jacobi, Prussian Guard Artillery, and Captain Mazé, French Artillery, who translated Jacobi's *brochure*, adding a long and interesting appendix containing his own

<sup>1</sup> Private letter from Major-Gen. P. H. Sandilands, R.A.

<sup>2</sup> "There were in the field with the Horse Artillery forty pieces of heavy calibre" (Frazer, p. 38).

observations. He fully endorses Jacobi's remarks about our Brigades: "Il est bien difficile d'établir une discussion sur la composition des batteries (de campagne) et parcs d'artillerie anglaise; car . . . tout est incertitude et confusion dans cette branche du service."<sup>1</sup> Engrossed with the failings of our Brigades, Lieutenant Jacobi forgot that the uncertainty and confusion he observed were caused by a fiction circulated, if not coined, by an Officer of his own Corps, Major C. von Decker; a fiction which paralysed the Prussian Field Batteries as well as our own. The Prussian Field Batteries at this period were as attenuated as the English. The men were  $\frac{1}{2}$ , the guns  $\frac{1}{4}$ , the horses  $\frac{1}{3}$  of their war strength, and, as late as 1823, recourse was had occasionally to contract horses. Not only were the Batteries reduced to shadows, but, what was far worse, their organisation was as bad as ours and for the same reason; the same false assumption that the arm naturally resolves itself into Horse and Foot Artillery, the same fatuous attempt to make Garrison Artillery and the Field Batteries interchangeable.<sup>2</sup> And, as with us, all efforts to gain a better organisation were vain.<sup>3</sup>

<sup>1</sup> Page 157.

<sup>2</sup> "Der Hauptübelstand dieser Organisation war die Vielseitigkeit, die sie für die Fussartillerie, behufs gleichzeitiger Verwendung als Feld- und Festungsartillerie, anstrebte" (Müller, i. 95).

<sup>3</sup> "Alles streben nach einer anderen Organisation blieb fruchtlos" (*ibid.*, p. 96). The cause was palpable: "Prinz August war grundsätzlich gegen die Trennung der Feld- und Festungsartillerie" (*ibid.*, p. 94). Prince August's "principle" was, of course, Decker's.

Mazé goes on to say, from his own observation :  
 “L’instruction pratique des officiers et des canoniers, en ce qui concerne les manœuvres et le tir des bouches à feu, est on ne peut plus négligée.”<sup>1</sup>  
 Could it have been otherwise? As to the men—  
 if the reader will look back to Tables H, I, and J and allow for the men on duty, the employed and the sick, he will find that there were very few, if any, left to instruct. Could Officers be expert in handling Batteries when the men, horses, and guns were at vanishing point?<sup>2</sup> Could they be skilled in gunnery when practice was only known by tradition?<sup>3</sup> They were disheartened, and with good reason. Officers of Horse Artillery had, at least, the support of an excellent organisation and the strong *esprit de corps* it always engenders; but this stimulus was denied to the great majority—the Officers of the changeling “gunner-and-driver.” Disheartened men were not likely to drown dull care in the study of theoretical gunnery. But the continental Artilleries were in much the same case, and there is no reason to believe that foreign

<sup>1</sup> Page 168.

<sup>2</sup> The same inevitable shortcomings were noticed in Germany : “Es war nicht möglich, den Batteriechefs Fertigkeit in der Führung der Batterien zu verschaffen” (Müller, i. 96).

<sup>3</sup> On the 13th February, 1854, General Sir de Lacy Evans asked in the House of Commons “whether sufficient practice was afforded to the Artillery, at Woolwich, and, if not, whether the B.O. would propose any remedy for this deficiency.” Mr. Monsell replied that “the subject would receive the most careful attention from the Ordnance.” That day fortnight we sent our *ultimatum* to Russia, 27th February, 1854.

Artillery Officers at this time were a whit better skilled in their profession than our own.

In the meagre facts that have been related consists the history of the Regiment, 1827-1846.<sup>1</sup>

<sup>1</sup> On several occasions during this period Troops were called out to assist in quelling serious riots, and on every occasion behaved as well as possible. But these matters belong rather to Troop than to Regimental History.

## CHAPTER VI

### THE AUGMENTATIONS, 1846-1853

THE political sky was clouded in 1845. The Oregon boundary difficulty with America became so acute that a radical member of the House of Commons, Mr. Williams, forbore to move a reduction of the Army Estimates as he had intended;<sup>1</sup> the Spanish Marriage question produced much tension in our relations with France; and the Sikhs crossed the Sutlej on the 11th December. Among the consequences of this state of things was the addition of a 10th Battalion to the Regiment in 1846.

During the first four years of Sir Robert Peel's Government, the Duke of Wellington repeatedly reminded Ministers of the defenceless state of the country. On 10th September, 1845, he addressed to them an important Memorandum. After personally inspecting the South Coast of England, he sent a fuller Memorandum to Lord John Russell, on the 12th August, 1846, and shortly afterwards he wrote a third, urging the formation of a Militia. Finally, on 8th February, 1847, he wrote a fourth and formidable Memorandum. We had only 50,000

<sup>1</sup> S. Walpole, "History of England, from 1815," v. 341.

men in these islands, he said, and there were not 5000 of these who could be employed "on any service whatever without leaving standing at their posts, without relief, all men now on duty, whether in guard of the Queen's person or her palaces, of naval arsenals and stores, of the Bank, of the Tower, or elsewhere."<sup>1</sup> Much was said and much was written by Ministers about this Memorandum, but nothing had been done when, by some inadvertence of Sir John Burgoyne, there appeared in the *Morning Chronicle*, 4th January, 1848, a confidential letter which had been written to him early in 1847 by the Duke of Wellington on the military decrepitude of the country. The people were alarmed; the Manchester School were irritated; and Mr. R. Cobden at once expressed his indignation at what he considered a false alarm. Immersed in problems of "Profit and Loss" (which, it is now said, he did not understand), Mr. Cobden had never found time to read the fable of "Wolf, Wolf!" The Duke, he said, was in his seventy-seventh year—"that explains it all, and excuses it all. . . . I do not profess to share the veneration which some men entertain for successful warriors. . . . The question before us is not a military, not a naval question, but a question for civilians to decide. When we are at war, then the men with red clothes and swords by their sides may step in to do their work . . . and a damnable trade it is."<sup>2</sup> This speech

<sup>1</sup> "Life of Lord John Russell," Walpole, ii. 15.

<sup>2</sup> "Speeches by R. Cobden," Bright and Morley, p. 234.



was made at Manchester on the 27th January, 1848, and on the evening of the 25th February news reached London that there had been another revolution in France, and that the French king was a fugitive, fleeing no one knew whither. "The convulsion which upset the throne of Louis Philippe was felt in every corner of Europe. The Emperor of Austria was forced to abdicate; Lombardy was temporarily lost to the Austrian Empire; the throne of Prussia was shaken . . . even the Pope was forced to quit Rome; while the Chartists in England and the Repealers in Ireland grasped at the opportunity which was suddenly presented to them. Thus internal, and not external, dangers became the theme for discussion; and, instead of organising a militia to meet the French, the Government was soon enrolling special constables to meet the Chartists."<sup>1</sup>

The following Table, O, shows the state of the Field Artillery at this time. The Troops, Brigades, Guns, and the total of the horses are accurately given, but there is some slight uncertainty about the distribution of the horses, more particularly in the Brigades. The figures may be taken, however, as a very close approximation to the truth. At the beginning of the (financial) year, 1st April, 1847, the total of the horses was 1056. When Sir Robert Gardiner counted them

<sup>1</sup> "Life of Lord John Russell," Walpole, ii. 25. Among the special constables sworn in was Prince Louis Napoleon Buonaparte, afterwards the Emperor Napoleon III.

nine months afterwards, the total was 1038, showing a reasonable wastage of eighteen horses.<sup>1</sup> This Table shows that the country was not burdened with a bloated armament of Field Artillery in

TABLE O<sup>1</sup>

THE FIELD ARTILLERY IN THE BEGINNING OF 1848

Station.	Troops.	Brigades.	Guns.		Horses.	
			R.H.A.	R.A.	R.H.A.	R.A.
Riding Estab. .	...	...	...	...	...	15
Woolwich .	3	4	6	16	187	169
Weedon .	...	$\frac{1}{2}$	...	2	...	0
Manchester .	...	$\frac{1}{2}$	...	2	...	0
Leeds .	1	...	2	...	62	...
Newcastle .	1	...	2	...	62	...
Leith .	...	$\frac{1}{2}$	...	2	...	28 <sup>3</sup>
Glasgow .	...	$\frac{1}{2}$	...	2	...	0
Ireland .	2	5	8	20	134	213
Canada .	...	3	...	12	...	168
Totals .	7	14	18	56	445	593
			74		1038	

the year 1848. There were but sixty-two field-guns in the hands of the Artillery in these Islands, and only thirty-four in England and Scotland.

<sup>1</sup> (a), p. 17. On the 1st April, 1848, the horses rose to 1073. See Table Q.

<sup>2</sup> Gardiner (a), b, extended.

<sup>3</sup> Whinyates, "Coruña to Sebastopol," p. 293.

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These guns were all light 6-prs., the Brigades not having sufficient horses for 9-prs., and they were not all horsed. The Brigades at Manchester and Weedon were supplied with harness, and, by a touch of official irony, they had orders "to hire horses if necessary."<sup>1</sup> The four Brigades at Woolwich had both horses and harness, but they were immovable for a different reason. They were "ill-organised, uninstructed, unskilled, and incapable of either riding or driving. . . . Not one of the four is capable of moving; and on the 10th April last (1848), a Field Battery being ordered to London (to overawe the Chartists), the gunners and drivers were so perfectly inadequate to the service that they were removed,<sup>2</sup> and other gunners and drivers substituted for the day. . . . Not one of these four Brigades has ever been out under its Officers: they are still under the Sergeant-Major."<sup>3</sup> The average time which six other Companies, taken at random, had been under instruction, was four months and twelve days, much of which time had been spent by the drivers "in carters' work in the civil departments of the Arsenal."<sup>4</sup>

Happily there is another and a brighter side to the picture: the other branch of the Field Artillery service, although greatly reduced in numbers, was then, as always, in excellent order. In his evidence to the Select Committee on Navy and Army Ex-

<sup>1</sup> Whinyates, "Coruña to Sebastopol," p. 293.

<sup>2</sup> Gardiner (*ib*), pp. 14, 50. It is said that this Brigade got as far as Charlton on the way to London, and was then sent back.

<sup>3</sup> *Ibid.*, p. 21.

<sup>4</sup> *Ibid.* (*a*), p. 16.

penditure, 1848-49, Sir Robert Gardiner declared that the Horse Artillery was "perfect." Upon this the Committee very naturally asked, "How is it that the Brigades are not as perfect in their own way as the Horse Artillery are in theirs?" Sir Robert replied: "That is a question of system and organisation. The efficiency of the Horse Artillery, and the want of it in the Brigades, shows the system of the one to be good and the other bad."<sup>1</sup> The Committee did not push the inquiry home. Had they asked Sir Robert in what particular point the organisation of the Brigades failed, he would have readily told them. All that was wanted to render the Brigades efficient, as he says elsewhere, was the adoption of the Horse Artillery driver system, "by which the drivers would remain permanently attached to the Field Batteries."<sup>2</sup> It was quite necessary, as several other Horse Artillery witnesses urged before the Committee, to keep the Horse Artillery in a high state of efficiency, to enable them to support the Cavalry; but no one seems to have remembered that it was equally necessary to maintain the Brigades in as high a state of efficiency, to enable them to support the predominant partner, the Infantry.

It may be that, on their return to the Garrison Artillery, the Captains of the Companies which had been hurried through the course of Field Artillery training found their system somewhat dislocated and their methods deranged, without any compensating advantage. But, apart from this temporary dis-

<sup>1</sup> (b), p. 17.

<sup>2</sup> (a), p. 21.

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turbance, the Garrison Artillery appears to have been efficient in every respect except numbers. These were dangerously low in 1848, as the following figures show.<sup>1</sup> There were in—

Plymouth . . .	3	Companies to	234	guns, i.e. less than	2	gunners per gun.
Portsmouth . . .	3	"	272	" " "	1	" "
Dover . . .	2	"	58	" " "	4	" "
Sheerness . . .	$\frac{1}{2}$	"	82	" " "	1	" "
Landguard Fort . . .	$\frac{1}{2}$	"	26	" " "	2	" "
Pembroke Dock . . .	$\frac{1}{2}$	"	16	" " "	3	" "
Jersey . . .	1	"	127	" " "	1	" "
Gibraltar . . .	5	"	653	" " "	1	" "
Malta . . .	2	"	486	" " "	1	" "

*N.B.*—The Companies have been taken at 90 gunners.

The general deficiency of the Garrison Artillery in numbers is shown in the following Table,<sup>2</sup> P.

TABLE P

Fortresses.	Guns.	Available Gunners.
England . . . .	842	...
Scotland . . . .	149	...
Ireland . . . .	265	...
Channel Islands . . .	198	...
Abroad . . . .	3,358	About
Total . . . .	4,812	8,850

In consequence of the troubled state of the political world, at home and abroad, an 11th and 12th Battalion were formed on the 1st November,

<sup>1</sup> Gardiner (*a*), 10.

<sup>2</sup> *Ibid.*, 13. I have been unable to procure materials to enable me to verify these figures, but I believe them to be substantially correct. Sir Robert gives the available gunners as 9000.

1848, and the 5 two-gun Troops in England were raised to 4 guns, with 65 horses each, 70 horses being allowed to the 2 Troops in Ireland.

A commercial crisis in 1848 and a terrible famine in Ireland not only prevented the Ministry from carrying out plans they had formed for strengthening the defensive forces of the country in 1849, but left them powerless to maintain the forces they actually possessed. Their plans necessitated an income tax of 5d. in the £1; the House of Commons preferred the chance of invasion to the income tax; and in the end Mr. Cobden was able to announce to his constituents, on the 8th March, 1850, that "last year we withdrew a few thousand drunken men from the service."<sup>1</sup> The following Table, Q, shows the amount of this reduction:—

TABLE Q

STRENGTH OF ARMY, ARTILLERY AND ARTILLERY HORSES,<sup>2</sup>  
1847-1853

	1847.	1848.	1849.	1850.	1851.	1852.	1853.
Army .	108,398	113,847	103,254	99,128	98,714	101,937	102,283
Artillery .	10,512	11,988	11,719	11,945	11,949	12,963	15,115
Artillery Horses . }	1,056	1,073	1,315	1,410	1,393	1,435	2,585

<sup>1</sup> "Speeches, &c.," Bright and Morley, p. 259.

<sup>2</sup> Clode, "Military Forces of the Crown," i. 400, for the Army. The figures for the Artillery and Artillery Horses are taken from the "Ordnance Estimates." The "Army" includes neither the Artillery nor the garrison of India.

Early in 1851, the 5 Troops in England were raised to 70 horses, shown by the slight increase in horses in 1852, Table Q. On the 2nd December, 1851 took place the *Coup d'État* in Paris, which produced the augmentation of the Army and Artillery, 1852. "When Lord Hardinge (previously Sir Henry Hardinge) became Master-General, March, 1852, his first act was to order 300 field-guns, with 600 waggons, to be got ready in the Arsenal, and the Field Artillery of the United Kingdom was increased to 120 guns."<sup>1</sup> As the guns of all Batteries were raised to 6, this gave a force of 7 Troops and 13 Brigades for the United Kingdom.

Before the alarm caused by the troubles in France had passed away, the Eastern Question arose and produced the augmentations shown in Table Q for 1853.

In June, 1853, was formed a camp of exercise at Cobham, under General Lord Seaton, a Waterloo veteran. It attracted much attention, for no Camp of Instruction had been seen in England since Sir John Moore's camp at Shorncliffe in 1805. The Artillery consisted of 1 Troop and 3 Brigades, which were changed from time to time.

<sup>1</sup> MS. Memo. by Sir Robert Biddulph, in the writer's possession.

TABLE R<sup>1</sup>  
A TROOP, 1853

Officers.	N.-C. Officers.	Trumpeters,	Gunnors.	Drivers.	Artificers.	Total.	Horses.	
							Riding.	Draught.
							56	80
5	14	2	79	54	6	160	136	

The armament was 4 light 6-pounders and 2 12-pounder Howitzers. There were 16 Carriages, 4 Gun-Carriages, 2 Howitzer Carriages, 7 Ammunition Waggons, 1 Rocket Carriage, 1 Forge and 1 Captain's Cart.

TABLE S  
THE FIELD ARTILLERY, 1ST APRIL, 1853

	Troops.	Brigades.	Guns.		Horses.	
			6-Prs.	9-Prs.	R.H.A.	R.A.
England . .	6	8	36	48	816	768
Ireland . .	1	4	6	24	136	384
Scotland . .	...	1	...	6	...	96
Canada . .	...	2	8	...	...	120
Riding House .	...	...	...	...	...	25
Remount Estab.	...	...	...	...	...	240 <sup>2</sup>
	7	15	50	78	952	1,633
			128		2,585	

<sup>1</sup> Whinyates, "Coruña to Sebastopol," p. 294.

<sup>2</sup> If any of the three Companies at the Cape, 4/5th Battalion, 3/7th Battalion, and 4/8th Battalion, were Brigades at this date—a matter the writer has not been able to ascertain—their horses are included in this total.



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TABLE T  
HORSE BRIGADE, BATTALIONS AND BRIGADES  
31ST DECEMBER, 1853  
(a) *Royal Horse Artillery*

Troop.	Station.
A	Canterbury
C	Woolwich
D	Christchurch
E	Brighton
F	Woolwich
H	Weedon
I	Dublin

## (b) *Battalions*

[B. means Brigade]

Battn.	Coy.	Station.	Battn.	Coy.	Station.
1	1	Athlone (B.)	3	1	Woolwich
"	2	Sheerness	"	2	Ballincollig (B.)
"	3	"	"	3	Gibraltar
"	4	Dover	"	4	Woolwich (B.)
"	5	Corfu	"	5	Dublin (B.)
"	6	Devonport	"	6	{ Pendennis and St.
"	7	Barbadoes	"		{ Mawes
"	8	Bristol (B.)	"	7	Malta
			"	8	Woolwich
2	1	Kingston, Canada	4	1	Kingston, Canada
"	2	London, "	"	2	Barbadoes
"	3	Malta	"	3	Mauritius
"	4	Hull	"	4	Woolwich
"	5	Corfu	"	5	Devonport
"	6	Kilrush	"	6	Malta
"	7	Bermuda	"	7	Woolwich
"	8	Gibraltar	"	8	Charlemont

(b) *Battalions* (continued)

[B. means Brigade]

Battn.	Coy.	Station.	Battn.	Coy.	Station.
5	1	Woolwich	9	1	Alderney
"	2	Leith	"	2	Jamaica
"	3	Jamaica	"	3	Landgard Fort
"	4	Cape of Good Hope	"	4	Barbadoes
"	5	Gibraltar	"	5	Jersey
"	6	Barbadoes	"	6	Corfu
"	7	Manchester (B.)	"	7	Portsmouth
"	8	Halifax, N.S.	"	8	Sheerness
6	1	Limerick (B.)	10	1	Quebec (B.)
"	2	Bermuda	"	2	Montreal (B.)
"	3	Ceylon	"	3	Halifax, N.S.
"	4	Guernsey	"	4	{ St. John's, N. Brunswick
"	5	Sheerness	"	5	Ceylon
"	6	Jamaica	"	6	Bermuda
"	7	Portsmouth	"	7	Barbadoes
"	8	Leith (B.)	"	8	St. Helena
7	1	Woolwich	11	1	Woolwich
"	2	Mauritius	"	2	"
"	3	Cape of Good Hope	"	3	Dover
"	4	Gibraltar	"	4	Eastbourne
"	5	Spike, Ireland	"	5	Woolwich
"	6	Shorncliffe (B.)	"	6	"
"	7	Sheerness	"	7	" (B.)
"	8	Dover	"	8	" (B.)
8	1	Jamaica	12	1	Woolwich (B.)
"	2	Tilbury Fort	"	2	Portsmouth
"	3	Plymouth	"	3	Woolwich
"	4	Cape of Good Hope	"	4	" (B.)
"	5	Gibraltar	"	5	Portsmouth
"	6	Portsmouth	"	6	Plymouth
"	7	Ceylon	"	7	Dublin
"	8	Hong Kong	"	8	"

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*(c) Brigades*

Battalion.	Company.	Letter.	Station.
1	1		Athlone
"	8		Bristol
3	2		Ballincollig
"	4	B	Woolwich
"	5		Dublin
5	7		Manchester and Leeds
6	1		Limerick
"	8		Leith and Fort George
7	6		Shorncliffe
10	1		Quebec
"	2		Montreal
11	7	A	Woolwich
"	8	G	"
12	1	E	"
"	4	F	"

The lettered Brigades are the Woolwich Batteries of Instruction.

The stations of the two Brigades in Canada are doubtful.

It is also doubtful whether any of the three Companies at the Cape were Brigades in December, 1853.

These doubts arise from the absence of B.O. Returns showing the Brigades. That such returns may exist among the vast mass of Ordnance papers in the Public Record Office the writer does not deny ; but, if they exist, he has not been fortunate enough to find them. All the returns he has seen are made out on the Decker form, like Table V here.

# THE AUGMENTATIONS, 1846-1853 91

It may be well to say that this Table only holds good for the time specified, December, 1853. Other Companies may have been serving in place of the above three months previously, and others again may have taken their places a few months afterwards. There was no fixity of tenure.

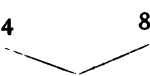
TABLE U  
LOCAL DISTRIBUTION OF THE REGIMENT  
31ST DECEMBER, 1853

		Troops.	Companies.	Brigades.
Home Group . . .	{ England . . .	6	33	8
	{ Ireland . . .	1	5	4
	{ Scotland . . .	...	1	1
	{ Channel Islands . .	...	3	...
	Total . . . . .	7	42	13
Mediterranean Group	{ Gibraltar . . .	...	5	...
	{ Malta . . . . .	...	3	...
	{ Corfu . . . . .	...	3	...
	Total . . . . .	...	11	...
Western Group . .	{ Canada . . . . .	...	4	2
	{ Nova Scotia . . .	...	2	...
	{ Bermuda . . . . .	...	3	...
	{ West Indies . . .	...	9	...
	Total . . . . .	...	18	2
Southern Group . .	{ St. Helena . . . .	...	1	...
	{ Cape of Good Hope <sup>1</sup>	...	3	...
	{ Mauritius . . . . .	...	2	...
	Total . . . . .	...	6	...
Eastern Group . .	{ Ceylon . . . . .	...	3	...
	{ Hong Kong . . . .	...	1	...
	Total . . . . .	...	4	...
	General Total . . .	7	81	15

<sup>1</sup> See note to Table T (c).

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In 1823 the Duke of Wellington discovered that of the 42 regimental Lieutenant-Colonels and Majors only 4 were on foreign service, and he assembled a Committee to consider the matter. They reported that 12 was the *minimum* number who ought to be abroad. The following consequently became the distribution of the Field Officers in regard to foreign service :—

	No. of F. Offs. Abroad (Old System).	Additional F. Offs. Ordered Abroad (New System).
Gibraltar . . .	1	1 (Major)
Malta . . .	...	1
Ionian Islands . .	...	1
Canada . . .	1	1 (Major)
Halifax . . .	1	...
Jamaica . . .	...	1
West Indies . . .	...	1
Cape of Good Hope .	...	1
Isle of France . .	...	1
Ceylon . . .	1	...
	—	—
	4	8
		
	12	

From the Dickson Papers, "Journal," 23rd August, 1823. The Field Officers do not appear to have welcomed this arrangement.

TABLE V<sup>1</sup>

STRENGTH OF THE REGIMENT, 1ST APRIL, 1853

	Officers.	N.-C. Offs. and Men.	Total.	Horses.
R.H.A. . .	44	1,064	1,108	952
R.A. . . .	559	13,448	14,007	1,633
Total . .	603	14,512	15,115	2,585

This Table, on Decker's form, tells us the truth, but not the whole truth. By huddling together the Garrison Artillery, the Brigades, the Riding House and the Remount Establishment it suppresses many valuable facts and gives an inadequate notion of the actual state of things. When expanded it takes the following form :—

TABLE V (*bis*)

STRENGTH OF THE REGIMENT, 1ST APRIL, 1853

	Officers.	N.-C. Offs. and Men.	Total.	Horses.
R.H.A. . .	44	1,064	1,108	952
Garrison Artillery	478	11,200	11,678	...
Brigades . .	77	2,100	2,177	1,368
Riding House .	3	28	31	25
Remount Estab. .	1	120 <sup>2</sup>	121	240
Total . .	603	14,512	15,115	2,585

<sup>1</sup> Clode, "Military Forces of the Crown," ii. 778.

<sup>2</sup> Merely attached for the moment. See note, Table S.

## CHAPTER VII

### THE MATÉRIEL, 1815-1853

#### ORDNANCE

WHEN the Committee of Revision handed in their Report in April, 1820, the 24-pr. was still the heaviest gun in the service.

In 1824 General Millar introduced two powerful and useful pieces, the 10-in. and 8-in. Shell Guns.

A large number of 24-prs. were reamed up to 32-pr. calibre in 1830, and in 1841 Col. Dundas, the Inspector of Artillery, constructed the 68-pr. of 95 cwt., the best smooth-bore ever cast.

As will be seen when Sir A. Dickson's "Journal" is published, proposals for rifled guns and muskets and for the use of detonating powder in various ways were made to the Ordnance Committee from 1815 onwards.

In 1847-50 we made unsuccessful experiments with a gun made on the principle of the Swedish Baron Wahrendorf—a smooth-bore breechloader.<sup>1</sup> The Lancaster system—an elliptical bore, with a twist—was tried in 1850-52 with sufficient success to justify our sending a few Lancaster guns to the Crimea. After further experience these guns were discarded.<sup>2</sup>

<sup>1</sup> Müller, i. 165.

<sup>2</sup> Commander Scott, R.N., gives an account of the trials of a number of rifled guns constructed about this time in "Journal, R.U.S.I.,"

## CARRIAGES

There was no change in the carriages between 1815 and 1853 which calls for any remark here.

## AMMUNITION

Sir William Congreve's Rockets, introduced in 1806, were superseded in 1846 by Hale's stickless Rockets, which are still in the service.

The final experiments with Shrapnel Shell were carried out at Woolwich in 1819. The result of 1090 rounds was: blind, 111; burst in bore, 74; burst in target, 71—*i.e.* 23 per cent. failures.

To get rid of the feeble slow-match and the dangerous portfire, Captain Sir Charles Douglas, R.N., devised the Gun-Flint-Lock in 1778. It was simply a flint and steel apparatus fastened to the vent-plate, which, on pulling a lanyard attached to it, generated a spark over the priming powder. This lock was introduced into the Artillery in 1820 at the instance of Sir Alex. Dickson. Writing to Lieut. Rowland C. Dickson, Bengal Artillery, on the 17th January, 1823, Sir Alexander says: "Common (flint) locks are in universal use, and they are recommended even for field-pieces when not pressed by an enemy." The last clause explains why the lock was not exclusively used for field-guns.

The present Friction Tube was invented in 1851 by Mr. Tozer, Royal Laboratory, and in time superseded all other means of igniting the charge.

vol. xxi. See also Parliamentary Blue Book, "Report, Ordnance," 25th July, 1862.



A Concussion Fuse was invented by Quartermaster Freeburn, R.A., in 1846, and the first Percussion Fuse was invented in 1850 by Commander Moorsom, R.N.

Captain E. M. Boxer, R.A., proposed his wooden Time Fuse in 1849, and it was adopted in 1850. In the final pattern of this Fuse, 1854, we possessed the best Time Fuse in the world.

In 1840 Sir Charles Wheatstone invented an "Electro-magnetic Chronoscope,"<sup>1</sup> still to be seen in the Museum of King's College, London, to replace the ponderous Ballistic Pendulum of Robins. The invention was rejected by the Board of Ordnance, and it was left to a foreigner to follow up this brilliant idea, Captain Navez, of the Belgian Artillery, who fully acknowledged his obligations to Wheatstone.<sup>2</sup> Little progress, however, was made in electro-ballistics until the publication of the Rev. Professor Bashforth's patient and admirable investigations, based on *data* supplied by the Chronograph which he constructed.

### SIEGE TRAINS

The Committee of 1819 proposed 100 heavy pieces and 40 small mortars as the basis of future siege trains, in the proportions—60 guns, 15 howitzers, 25 iron and 40 brass mortars. Whatever the class of the fortress and the size of the

<sup>1</sup> *Comptes Rendus de l'Academie des Sciences*, 1845, xx. 1554-61.

<sup>2</sup> *L'Application de l'Electricité à la mesure de la Vitesse des Projectiles*, Paris, 1853, pp. 4, 5.

siege train required, the guns, howitzers and iron mortars were to be employed in the above proportions, 12 : 3 : 5.

TABLE W  
BASIS OF A SIEGE TRAIN, 1820

Ordnance.	Guns.		Howitzers.		Mortars.			
	24-Pr.	12-Pr.	10-In.	8-In.	10-In.	8-In.	5.5-In.	4.4-In.
Brass . . .	...	...	...	...	...	...	20	20
Iron . . .	40	20	5	10	10	15	...	...

TABLE X  
AMMUNITION FOR SIEGE TRAIN, 1820

	Round Shot.	Case.	Spherical (Shrapnel).	Pound Shot. <sup>1</sup>	Common Shell.	Carcasses.
40 24-Prs. .	40,000	2,000	4,000	...	...	...
20 12 " .	24,000	1,000	2,000	...	...	...
5 10" Howrs.	...	...	...	...	3,000	50
10 8" "	...	...	3,000	...	3,000	100
10 10" Mors.	...	...	...	500	6,000	100
15 8" "	...	...	...	...	9,000	150
20 5½" "	...	...	...	...	4,000	...
20 4½" "	...	...	...	...	4,000	...

" With regard to the transport of Shot, Shell and Ammunition in general, the resources of the country (in which the siege is laid) must on all occasions be depended upon."

<sup>1</sup> See Owen's "Modern Artillery," p. 96.

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TABLE Y<sup>1</sup>  
HORSES FOR SIEGE TRAIN, 1820

Ordnance.	Waggons, &c.	Spare Carriages.
40 24-Prs. . . 400	7 Platform Wgns. 28	4 24-Pr. Carrs. . 24
20 12 " . . 120	100 Flanders " 400	2 12-Pr. " . 8
5 10" Howrs. . 50	10 Store " 40	1 10" Howrs. . 6
10 8" " . 60	50 Handcarts (with	1 8" " . 4
10 10" Mors. . 80	shafts) . . 50	5 Large Drags . 0
15 8" " . 64	50 Trench Carts . 50	5 Small " . 0
	10 Forges . 40	2 " Devils . 0
Total . 774	Total . 608	Total . 42
	774	
	42	
	General Total . 1424	

The ten 10" Mortars (and beds) were carried by 10 Platform Waggons, 8 horses each; the fifteen 8" Mortars by 8 Platform Waggons, 8 horses each. The 40 small Mortars appear to have been carried by the remaining 7 Platform Waggons and other carriages, col. 2. The 5½" Mortars weighed only 1¼ cwt.; and the 4¾" Mortars ¾ cwt. Owing either to printers' errors or to oversights in condensing the original, the tabulated statement on p. 231 of Sir Henry Lefroy's paper is not easy to understand. A partial total of 200 occurs in one place, which is an error for 100 and makes the general total 1524 horses instead of 1424, the correct total.

## FIELD ARTILLERY

Mountain Batteries consisted of three 3-pr. Guns and one 4.4" Howitzer.

<sup>1</sup> For Tables W, X and Y, see "Proceedings, R.A.I.," i. 178-181.

Troops and Brigades consisted of 5 Guns and 1 Howitzer until 1852, when they were given 4 Guns and 2 Howitzers. Heavier Batteries consisted of 3 Guns and 1 Howitzer.

TABLE Z  
MOUNTAIN GUNS, 1815-1853

	Weight Lbs.	No. of Rounds.	Mules.	
3-Pr. .	252	108	4	{ 1 mule for gun, 1 for carriage, 2 for ammunition.
4.4" Howrs. .	280	72	5	{ 1 mule for howitzer, 1 for carriage, 3 for ammunition.

TABLE AA  
TROOP AND BRIGADE GUNS, 1815-1853

	Weight of				Total Weight.	No. of Rounds in Gun Lim- ber and Waggon.
	Gun.	Carriage.	Limber.	Ammun. in Limber.		
	cwts. qrs.	cwts. qrs.	cwts. qrs.	cwts. qrs.	cwts. qrs.	
{ 6-Pounder .	6 0	8 3	8 1	4 2	27 2	194
{ 12" Howr. .	6 2	9 3.5	8 1	4 2.5	29 1	136
{ 9-Pounder .	13 2	11 3	8 1	4 3	38 1	128
{ 24-Pr. Howr.	12 2	12 0	8 1	5 3	38 2	84
{ 12-Pounder .	18 0	12 3.5	8 3	4 3	44 1.5	104
{ 32-Pr. Howr.	17 3	12 3	9 3	6 1	46 2	68
				(stores)		(all in waggon)
{ 18-Pounder .	38 0	17 2	7 1	2 1.5	65 0.5	60
{ 8" Howr. . (iron)	20 0	24 0	7 2	2 3	54 1	28

TABLE AB<sup>1</sup>

## RANGES

[P.B. means Point Blank. L.M. means Line of Metal.]

	P.B.	$\frac{1}{2}^{\circ}$	$1^{\circ}$	$2^{\circ}$	$3^{\circ}$	$4^{\circ}$
R.H.A. {	Light 6-Pr. (round shot) . . . . .	200	400	(L.M.) 600	800	1000
	12-Pr. Howr. (common shell) . . . . .	...	...	400	600	800
Brigades {	9-Pr. (round shot) . . . . .	300	500	(L.M.) 700	1000	1200
	24-Pr. Howr. (common shell) . . . . .	...	...	450	650	850
Heavy Brigades {	18-Pr., 38 cwt. (round shot) . . . . .	380	...	700	960	1200
	8" Iron Howr. (common shell) . . . . .	330	...	513	706	907
Battering Guns {	24-Pr., 50 cwt. (round shot) . . . . .	355	...	752	1120	1420
	68-Pr., 95 cwt. (round shot) . . . . .	310	...	700	1070	1430

SIGHTS<sup>2</sup>

## (a) GARRISON GUNS

General Millar's dispart sight for iron guns, introduced into the Navy in 1829, was not adopted for the Artillery until 1846. It was fixed on the first reinforce, above and a little in front of the trunnions. Before this, garrison guns were de-

<sup>1</sup> Lefroy's "Handbook for Field Service," first edition.<sup>2</sup> "Remarks on Sighting Ordnance," by Captain Haultain, R.A., in "Occasional Papers," "R.A.I.," i. 189.

pendent upon the quarter-sights for elevation below the dispart angle. The gun was aligned by the line of metal (through notches on the top of the base-ring and muzzle) and the elevation was then given by the quarter-sights, which were awkward for even a well-trained gunner to use. For elevating a gun beyond the dispart angle, generally about  $2^{\circ}$ , a wooden tangent scale, "No. 2," was used; the line being taken by the line of metal and the elevation given afterwards.

### (b) FIELD-GUNS

Field howitzers had always, I believe, a dispart patch on the muzzle, but field-guns were not cast with one until the Crimean period. During the years to which this history relates, elevation beyond the dispart angle was very rarely wanted. The effective range of the musket was only 200 yards,<sup>1</sup> and the line of metal range for the 6-pr. was 600 yards, and 700 yards for the 9-pr. Elevation for ranges between 200 and 600 yards for the 6-pr. and between 300 and 700 yards for the 9-prs. was given by the quarter-sights.

Some Officer should write the history of Sights and Sighting from Eldred's time to the present day. Nothing of the kind, I believe, exists, and the facts are imperfectly known.

<sup>1</sup> See the chapter on "Infantry Fire-Formations" in "Stray Military Papers," by the present writer.

## PRACTICE

The earliest Order for practice known to the writer is B.O. Order, 27th July, 1836. The allowance of ammunition per Company was—

Garrison Ordnance, 32 rounds shot.

Field	"	32	"	"
Mortars,		16	"	shell, if recoverable.

This allowance was increased by B.O. Order, 17th January, 1848—

Garrison Ordnance, 80 rounds shot.

Field	"	80	"	"
Mortars,		40	"	shell, if recoverable.

No practice was allowed at Woolwich during the growth of the hay in the Plumstead Marshes,<sup>1</sup> and none, of course, could take place when shipping was in the way. The records show that Companies sometimes went down, day after day, and returned without firing a round. The method of practice, when it did take place, was not peculiarly instructive. It was thus described by Captain E. F. Grant to the "Committee on Navy and Army Expenditure," 1848, A. 8947: "You go into a Battery; a Sergeant brings you a card—'so many yards range; charge of powder so and so; elevation so and so,'" &c. &c. The guns were then

<sup>1</sup> For example, 1st July, 1823.—Experimental ricochet practice (of the Ordnance Committee) stopped on account of the hay. 10th July, 1823: "By this day's Orders practice in the Marshes is discontinued, I conclude on account of haymaking" (Dickson's "Journal," 21st June to 21st July, 1823).

loaded, laid, and fired *à la carte*, and the Company returned to barracks. This state of things led to the establishment at Shoeburyness. "The acquisition of land by the Board of Ordnance at Shoeburyness commenced in 1849, and the last purchase of the War Department was in 1860, for the purpose of enabling the Royal Artillery to exercise upon a large range. In addition to the land purchased, two large tracts of seashore are leased. . . . To free the land between high and low water-mark from intrusion, and to preserve the use of the estate for Artillery practice, the 25 & 26 Vict., c. 36, was passed, enabling the Secretary of State to mark out certain Artillery ranges, and to prohibit vessels from passing over the site under certain penalties to be recovered by a summary method."<sup>1</sup>

### HORSING GUNS

The Committee of Revision make some excellent remarks on horsing guns, but it was beyond their instructions to touch the heart of the matter.

Some of the guns, with their appurtenances, were perfectly adapted to their object as regards weight, for instance, the R.H.A. 6-pr., Table AA. Others were not so well adapted, and the system of the Board of Ordnance afforded no protection to the Field Artillery against the Arsenal or other gun-makers, who might at any moment come forward and say in effect: "Here is a new gun; it

<sup>1</sup> Clode, "Military Forces of the Crown," ii. 455.



carries a powerful shell ; its muzzle velocity is very great ; its probable rectangle at such and such a range is very small. Horse it." Now this is the very inverse of the rational procedure, as gun-makers might learn from Robinson Crusoe. On finishing his first canoe, he found that he could not launch it. He built it without considering the power available to launch it—his own unaided strength—and the consequence was the laborious construction of a second canoe. The cart must be made for the horse, the gun for the teams. The real question is that of "gunning the teams," not "horsing the guns," and it may be stated as follows : Given a team of so many horses, capable of drawing such and such a weight at the pace required by the branch of Field Artillery to which the team belongs ; to build a good gun and carriage, &c., which, with a certain amount of ammunition and allowing for the transport of so many gunners, shall not exceed the given weight.<sup>1</sup>

An inspection of the Tree in Appendix A may perhaps make the matter clearer.

#### MISCELLANEA

A Sub-Committee of the Committee of Revision, consisting of Colonel W. Millar, R.A., Colonel Sir

<sup>1</sup> This principle was pointed out more than thirty years ago by the present writer in "Proceedings, R.A.I.," vii. 458-459. It has been reaffirmed (no doubt independently) by Major Mariani, of the Italian Artillery, *La Questione dei Cannoni da Campo dell' Avvenire*. Rome, 1895.

W. Robe, R.A., Lieut.-Colonel Sir A. Frazer, R.H.A., and Captain (and Brevet Lieut.-Colonel) Sir A. Dickson, R.H.A.—the four junior members—prepared the Report, and made many useful recommendations, among which were the following :—

(a) The use of flannel instead of paper cartridge-cases.

(b) The use of leather instead of wooden gun-buckets.

(c) A gun-flint-lock for every gun, in addition to the existing igniters.

(d) A leather instead of a metal tube pocket.

(e) A considerable reduction in the weight of gunners' and drivers' kits.

(f) Corn-sacks to be carried by the horses.

(g) Horse Artillery cloaks for Brigade drivers.

(h) They were "decidedly of opinion that some defensive weapon is necessary for the Artillery drivers, whose situation in action is arduous and often much exposed to attack. . . . This is highly desirable, whether considered in its moral or physical effect."

(i) A canvas nose-bag, instead of a horse-hair one.

*Wellington* (in pencil).—"Is this right?"

*Sub-Committee*.—"The horses'-hair nose-bag soon becomes dirty. If washed, it wears out. . . . The canvas nose-bag is both cheaper and more durable."

The Proceedings of the Committee of Revision never received official sanction, the Duke of

Wellington refusing to sign them. Efforts were made from time to time to induce him to sign certain portions of them of which he had approved ; but these efforts were of no avail, and ultimately Lord Fitzroy Somerset told Sir Alexander Dickson that the Duke was not to be approached on the subject.

## CHAPTER VIII

### WAR SERVICES, 1815-1853

WHATEVER may have been the political results of the war services, 1815-1853, from a military point of view they were trivial.

Colonel Duncan has given an excellent account of the reduction of the French fortresses after Waterloo, which would be spoilt by any attempt to improve it.

In 1816 Lieutenant J. T. Fuller and a party of the Rocket Troop were present, on board a transport, during the attack on Algiers by Lord Exmouth. They are mentioned in Clowes' "Royal Navy," vi. 227, under the title of "Royal Rocket Corps." There was no such Corps. It is doubtful whether they used their rockets or not.

Sufficient has been said of the *personnel* and *matériel* of the Artillery sent to Portugal in 1827. Strictly speaking, it was not a war service, for not a shot was fired by them or at them.

There was a rebellion in Canada in 1837. On the 18th November of this year Captain G. M. Glasgow commanded two guns which were used against the rebels at St. Charles. Lieutenant A. Newcomen commanded two pieces sent against the rebels at St. Denis on the 22nd November. The

wheel of one of them, a howitzer, got frozen in a deep rut, and it had to be abandoned. It was recovered on the 2nd December.

In 1840 a small land force was sent to help the Sultan to drive Mehemet Ali out of Syria, which he overran in 1831. In his dispatch of the 5th November, 1840, Colonel Sir Charles Smith, who commanded, mentions that "a small detachment of the Royal Artillery and Sappers," under Major T. G. Higgins, R.A., and Lieutenant Aldrich, R.E., held a pass to the north of the town while Acre was stormed on the 3rd November. Casualties nil. Colonel E. T. Michell, R.A., who had been appointed (with the rank of Brigadier-General) to reorganise the Staff of the Turkish Army, was present. He died at Jaffa on the 24th January following.

During the operations, naval and military, which ended with the fall of Canton, 31st May, 1841, the Regiment was represented by thirty-three N.-C. Officers and men of 1/8th Battalion under 2nd Captain J. Knowles and Lieutenant Hon. R. C. H. Spencer. Casualties, one gunner-driver slightly wounded. The remainder of the Company, under Captain W. Greenwood, joined afterwards and took part in the second phase of the war, 10th August, 1841, to 29th August, 1842.

During the year 1847 there were further hostilities between England and China. Several forts were taken without resistance. Fort Wookontap fired on the flotilla which carried our force, but the

garrison fled when our men landed and formed for attack. The Artillery were commanded by Lieut.-Colonel (afterwards Sir William) Brereton.<sup>1</sup>

From 1844 P.R.O. it appears that when preparing for the first Chinese Expedition the Indian authorities pressed on the Home Government the expediency of supplying the whole of the Infantry with percussion muskets. Owing to the slowness of manufacture, this was only partially done. The wisdom of the Indian Government was shown on the 6th June, 1841, when, owing to torrents of rain, the 26th Cameronians, who still had Brown Bess, were unable to fire a shot, although threatened by large bodies of Chinese.<sup>2</sup>

We had desultory wars with the Kaffirs from 1811 to 1853, in which the Artillery, although occasionally employed, played a very small part. "I cannot persuade the people here," wrote Major H. R. Eardley-Wilmot, "that guns are of no use for this sort of work, as guns drive the Kaffirs away and our object should be to get near them. . . . Artillery is of no use in this country, except when escorting waggons, in a camp, or in forts."<sup>3</sup> The guns were generally employed by Half-Batteries or Divisions, occasionally singly, and

<sup>1</sup> The writer has failed to find papers connected with these operations in the Public Record Office. 1844 contains little more than correspondence about the Officers' allowances. Some details are given in Mr. James Brown's "England's Artillerymen," p. 257 ff.

<sup>2</sup> "The Chinese War, 1840-42," by Dr. D. MacPherson, p. 308; and Lord Gough's Dispatch.

<sup>3</sup> Jones's "Woolwich Journal," 1st April, 1852.

their services obviously belong to Battery, not Regimental History. If the exploits of every Officer and every fraction of Batteries and Companies are to be included in Regimental History, then arrangements must be made for the preparation of an Artillery Encyclopædia.

The Companies at the Cape during the last Kaffir War, 1851-53, were 3/7th Battalion, 4/8th Battalion, and 4/5th Battalion, the last commanded by Major Eardley-Wilmot, who was killed on the 2nd January, 1852. He was not with his guns at the moment, but was walking towards a hut in which lay concealed the Kaffir who shot him.

## APPENDICES





## APPENDIX A

### CLASSIFICATION OF AN ARTILLERY

IN general there are an indefinite number of modes of classifying a given group of objects, and we naturally select that mode which is the most convenient and most useful. For instance, no one would divide the British Artillery into the Hong Kong-Singapore Battalion and the rest of the Regiment. To do so would answer no useful purpose.

To render any systematic classification possible, we must first settle precisely the names of the objects to be classified and ascertain their distinctive differences. With this object we proceed to consider the names of the different objects and groups to be classified in the present case, and to point out those differences which will be employed here as being the most useful and practical.

Consider the phrase, "Artillery fire." It is equivalent to "the fire carried on by Artillery," where "Artillery" implies "guns with their appurtenances—carriages, ammunition, side-arms, &c. &c.—and gunners to serve them." From this point of view we may adopt the following definition:—

*Artillery* means guns, with their appurtenances, and gunners to serve them. This is the widest

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definition of the word, since it embraces both *matériel* and *personnel*. All cannon are movable to a certain degree, but only some cannon are sufficiently movable by beasts of burden to take part in the movements and manœuvres of an Army in the field.

*Mobility*, by a useful convention, expresses any degree of movability which enables Artillery, as defined above, to share in the manœuvres of an Army in the field. "Sharing in the manœuvres of an Army in the field" does not include the march of a Siege Train, protected by an escort, to besiege a fortress.

*Field Artillery* means mobile Artillery, with their means of draught—drivers, beasts of burden, harness, &c. It includes all Artillery which can share in the manœuvres of an Army in the field. The phrase is constantly wanted for this purpose, and to employ it to specify any one of the parts of the whole, for instance the Field Batteries, gives rise to endless and needless confusion.

*Horse Artillery*.—Sir Augustus Frazer somewhere expresses a wish that the gun detachments of all Field Artillery were mounted on horseback. Let us suppose for a moment that his wish has been gratified, and that we have before us a (real) Troop<sup>1</sup> and a properly-equipped Field Battery with

<sup>1</sup> It would simplify matters considerably to give back the old term "Troop" to the Horse Artillery. Field Batteries would then become simply "Batteries," and heavy Field Batteries, "Heavy Batteries." "Z Battery, Royal Horse Artillery," contains twenty-seven letters. "Z Troop" would convey the same information in six letters.

mounted detachments. Nominally, the Field Battery is now Horse Artillery; but is it so really? It certainly is not. The Troop is capable of making long movements at a very rapid pace, and this the Battery cannot do; for its mobility has been only increased infinitesimally by mounting its detachments on horseback.

Here, then, is the peculiar and distinctive characteristic of Horse Artillery, as Decker rightly and stoutly maintained.<sup>1</sup> The mounted detachments, however much they may attract the eye, are only a means to an end—a means of enabling Horse Artillery to make long movements at a very rapid pace.

Napoleon was thinking of Frederick the Great's immediate object in creating Horse Artillery, when he said: "*La Cavalerie ne rend pas de feux, et ne peut se battre qu'à l'arme blanche. C'est pour subvenir à ce besoin qu'on a créé l'Artillerie à cheval.*"<sup>2</sup> Until Frederick's time the Prussian Cavalry used to fire in line at the halt.<sup>3</sup> The bad consequences of this system were so clear at the battle of Molwitz, 1741, that the King abolished it, and eighteen years afterwards formed Horse Artillery, to supply the Cavalry with the fire of which he himself had deprived them. "*Die Kavallerie verlangte eine Feuerwaffe. 'Ihr sollt sie haben und zwar die beste von der Welt,' erwiederte der*

<sup>1</sup> Müller, i. 90.

<sup>2</sup> In Montholon, iii. 261.

<sup>3</sup> Nolan's "Cavalry Tactics," p. 30.

König, und er gab ihr die reitende Artillerie.”<sup>1</sup> But it became evident in time that the function of Horse Artillery was a broader one than had been originally intended, and its use was extended to all duties for which great mobility was indispensable. This was Frazer’s meaning when he said: “It should never be forgotten that it is to give celerity to the movement of guns, and not solely to attend Cavalry, that Artillerymen have been mounted.”<sup>2</sup>

*Field Batteries* differ from the Horse Artillery in their inability to make long movements at a very rapid pace, and from the Heavy Field Batteries in their capacity to cover a considerable distance at a trot.

*Heavy Field Batteries* are restricted by their weight to a walking pace.

*Mountain Batteries* differ from the rest of the Field Artillery in having their guns carried, instead of drawn, by beasts of burden.

*Galloping and Trotting*.—In the Tree on p. 119, “galloping” merely means “capable, on occasion, of galloping a considerable distance.” “Trotting” has a corresponding meaning.

*Garrison Artillery* here means Artillery armed with guns on fixed mountings, for the defence of the fortress to which they belong.

*Siege Artillery*.—In general, the Artillery employed for the attack of fortresses are of two kinds.

<sup>1</sup> Troschke, *Die Beziehungen Friedrich des Grossen zu seiner Artillerie*, p. 39.

<sup>2</sup> Page 151.

The first are armed with heavy guns mounted in various ways, with the exception of guns on fixed mountings. They can be transported, by whatever means, to the neighbourhood of the fortress to be attacked ; but their weight precludes their sharing in the manœuvres of an Army in the field, and they consequently do not possess mobility. The second kind are armed with guns of such a calibre that, when properly organised, they can act as Heavy Field Batteries. The first body is here called Siege Artillery. The second body is looked upon as Field Artillery, which assists (as it has always assisted—Tables W and AA) in siege operations, whether for the attack or defence. This view of the case may seem somewhat arbitrary ; but an assumption of some sort is forced upon us by the fact that Heavy Field Batteries and Siege Artillery merge into one another as day and night do. Some convention, therefore, is necessary when we wish to fix their boundaries for the purpose of classification, and after many trials the writer found this one the simplest, most convenient, and most practical.

*Fortress Artillery.*—Owing to the poverty of the Artillery vocabulary it is necessary (for the purpose of classification) to introduce this term, which includes Garrison and Siege Artillery. Fortress Artillery possess no mobility.

The principle of all bifurcate classifications, such as the following, is simply this, that the superior class is divided into two inferior classes distinguished by the possession and non-possession of

a single difference called the "basis."<sup>1</sup> For instance, the distinguishing difference between the two white billiard balls is the spot which one possesses and the other does not. The difficulty, as in the case of the Siege Artillery, is to find a basis.

For the primary division the basis is "mobility," which Field Artillery possesses and Fortress Artillery does not.

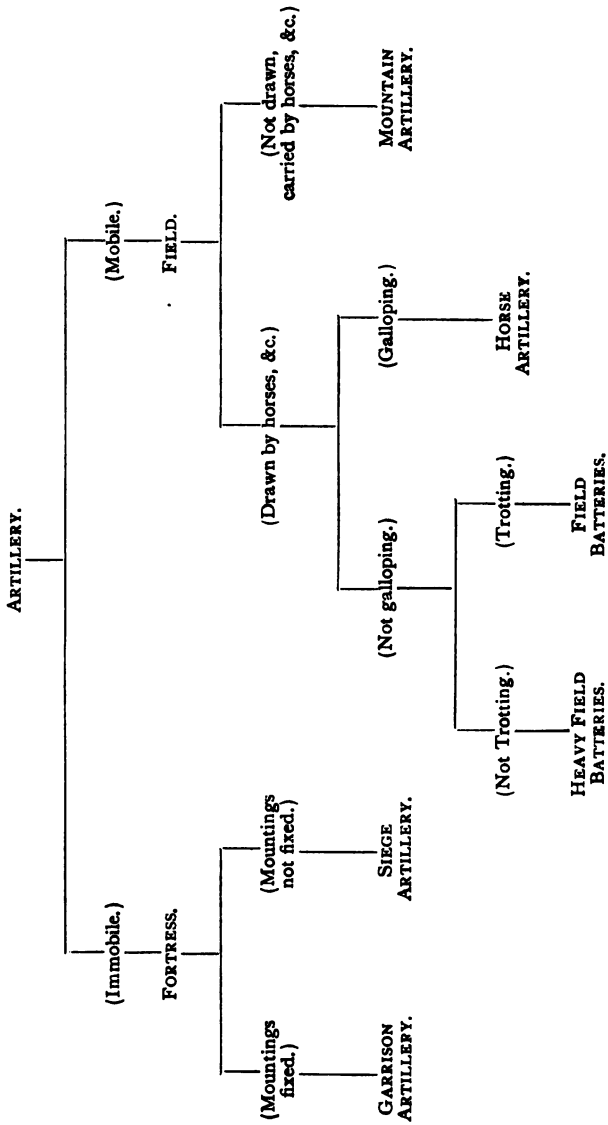
"Fixed Mountings" is taken for the basis which distinguishes Garrison from Siege Artillery.

Horses and Mules can only move a weight by drawing it or carrying it. Now one branch of Field Artillery works in general over ground which forbids the use of wheels. Field Artillery may therefore be looked on as consisting of two branches, the one "drawn," the other "not drawn," that is, "carried," by beasts of burden. "Drawn" is consequently taken as the basis for a primary division of Field Artillery.

Horses have three distinct paces available for draught—the walk, trot, and gallop. One branch of drawn Field Artillery must be capable of making long movements at a very rapid pace. To increase its mobility, the calibre of its guns is reduced and its gunners march on horseback. "Galloping" (in the sense already explained) may therefore be taken as a basis for the division of drawn Field Artillery.

<sup>1</sup> Jevons, "Principles of Science," p. 696. The Tree on next page is known in books on Logic as Porphyry's Tree. "It is the inevitable and only system which is logically perfect" (*Ibid.*, 694).

TABLE A C





For similar reasons, "trotting" may be taken for the basis of non-galloping, drawn Field Artillery.

The classification may be symbolised as follows on the plan of Professor Jevons' logical alphabet :<sup>1</sup>—

Let—

A = Artillery (as already defined).

M = mobile.

m = immobile.

F = fixed mountings.

f = not fixed mountings.

D = drawn (by beasts of burden).

d = not drawn (*i.e.* carried).

G = galloping.

g = not galloping.

T = trotting.

t = not trotting.

Then—

Am = immobile Artillery = Fortress Artillery.

AmF = Garrison Artillery.

Amf = Siege Artillery.

AM = mobile Artillery = Field Artillery.

AMd = carried Field Artillery = Mountain Artillery.

AMDTG = drawn Field Artillery which both trots and gallops = Horse Artillery.

AMDTg = drawn Field Artillery which trots but does not gallop = Field Batteries.

AMDtg = drawn Field Artillery which neither gallops nor trots = heavy Field Batteries.

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<sup>1</sup> "Studies in Deductive Logic," p. 181.

## APPENDIX B

### TROOPS AND COMPANIES REDUCED, 1816-1823

[\* means "served at Waterloo"]

1816.			1819.		1820.	1822.
Troop.	Company.	Driver Corps.	Troop.	Company.	Driver Corps.	Driver Corps.
D* K L M and Rocket Troop*	The whole 10th Battn. (10 Coys.)	4684	B G*	1 Battn. 9 Coy. 1 " 10 " 2 " 6 " 2 " 9 " 3 " 9* " 3 " 10 " 4 " 9 " 4 " 10 " 5 " 7 " 5 " 8 " 6 " 5 " 6 " 8 " 7 " 7 " 7 " 10 " 8 " 9 " 8 " 10 " 9 " 6 " 9 " 8 "	1173	288

The above list was drawn out by Mr. James Browne.

The Invalids were reduced to a detachment in 1819.

It will be seen that the following Waterloo Batteries were disbanded: D Troop (Bean's); 2nd Rocket Troop (Whinyates'); G Troop (formerly H, Ramsay's); 9/3rd Battalion (Sandham's); 2/10th Battalion (Lloyd's).

## APPENDIX C

### RECRUITING POSTER, 1845

#### FINE YOUNG MEN

of respectable Parents and Good Character, have an opportunity (if not married or Apprentices) of joining the

#### ROYAL ARTILLERY.

In which Superior Service they may be made gentlemen of and treated accordingly. They must measure 5 feet 8 inches in height and be between Eighteen and Twenty-two years of age. Growing lads not more than Seventeen may be admitted. They will all receive the same *Liberal Bounty of £5, 15s. 6d.*

On their arrival at Head Quarters they will be taught the art of *Riding, Driving, Drawing, Fencing, Gunnery, and the Mechanics, The making and use of Gunpowder, Sky Rockets, and other Fireworks*, and by the power of the lever to move a 42-pounder Battering Gun with the same facility as a *Penny whistle*.

The Cannon used in the Field are called

### FLYING ARTILLERY

from the astonishing rapidity of their movements. The Gunners (for so Artillerymen are styled) wear a

### SPLENDID UNIFORM

and are well mounted on taking the Field.

They are lodged in the finest Barracks in the World. They have Light Work and Good Pay, the best Beef that Kent can afford, and a comfortable place in the Barracks called "The Canteen" set apart for them to see their Friends in and take a cheerful glass; also a splendid Library and Reading Room; a Park and Pleasure Grounds, with a select number of Horses for their Instruction and Amusement. After their "Education" is completed they will have an opportunity afforded them to Travel to Foreign Countries, where they may drink their Wine at Two-pence per Bottle by the new Tariff!! If well conducted they will be promoted to

### NON-COMMISSIONED OFFICERS

from whom the Quartermasters are selected, who are the best paid in the Army, and return to see their Friends with money, manners, and Experience!!!

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The Rates of Pay of the Royal Artillery are as follows :—

	Per Day.
Quartermasters . . . . .	7s. 10d.
Sergeant Majors . . . . .	4s. 2½d.
Quartermaster Sergeants . . . . .	3s. 8½d.
Sergeants . . . . .	from 2s. 6½d. to 3s. 0½d.
Corporals . . . . .	from 2s. 3d. to 2s. 9d.
Bombardiers . . . . .	from 2s. 1d. to 2s. 7d.
Farriers . . . . .	from 3s. 3¾d. to 3s. 7¾d.
Collar Makers . . . . .	from 1s. 11¾d. to 2s. 3¾d.
Gunners and Drivers . . . . .	from 1s. 4½d. to 1s. 10½d.
Shoeing Smiths . . . . .	from 2s. 2½d. to 2s. 6½d.
Wheelers . . . . .	from 1s. 11¾d. to 2s. 3¾d.

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AT THE OLD ANGEL INN, TAUNTON.

TAUNTON, 8th *March* 1845.

## APPENDIX D

### THE ARTILLERY AT WATERLOO

THE myth that a large part of the Artillery fled from the field at Waterloo is in one respect unique ; we know its author, and we further know him to have been a man whose veracity was beyond suspicion. It was generally believed that this myth was killed by the Chapter devoted to it in Colonel Duncan's "History of the Royal Artillery." But myths have a strange vitality. It has been revived in his "Life of the Duke of Wellington," ii. 74, *n*, by Sir Herbert Maxwell, who betrays no suspicion of its truth and makes no reference or allusion to Colonel Duncan's book. This reproduction of the myth cannot be overlooked in a history of the Regiment which touches the year 1815.

The myth first appeared in a letter from the Duke of Wellington to Lord Mulgrave, dated Paris, 21st December, 1815, in which he expressed his disapprobation of any addition being made to the pensions of the Artillery Officers who had served at Waterloo, on account of the bad conduct of their men. As this letter is given in full by both Colonel Duncan and Sir Herbert Maxwell, it is

unnecessary to reproduce it here. Its salient points are as follows :—

(1) During the first part of the battle of Waterloo the Artillery was divided into a fighting line and a reserve. "I should have had no Artillery during the whole of the latter part of the action if I had not kept a reserve in the commencement" (Wellington).

(2) The Duke ordered the gunners of the fighting line to take shelter in the Infantry squares, in case the French Cavalry reached (as they repeatedly did) the plateau on which our Infantry and guns were posted. So far from obeying this order, "the gunners did no such thing" (Wellington).

(3) Instead of sheltering in the squares, the gunners "ran off the field entirely, taking with them limbers, ammunition, and everything; and when, in a few minutes, we had regained our ground and our guns and could have made good use of our Artillery, we had no Artillerymen to fire them" (Wellington).

(4) "I do not complain. . . . The Artillery, like others, behaved most gallantly" (Wellington).

How soldiers who ran away could be said, with any propriety of language, to have behaved most gallantly, the writer does not pretend to understand, and he leaves (4) to the ingenuity of his readers without further remark.

As regards (1), there was no definite reserve of Artillery during the first part of the battle of Waterloo, using the word "reserve" in its ordinary

sense to designate a special body of fresh troops kept apart to meet an emergency.

As regards (2), the order for the gunners to take shelter in the squares was virtually obeyed, except in one instance.

As regards (3), the flight of the British gunners, to whom the Duke expressly refers, was imaginary.

The reader may be reminded that the battle began about 11.30 A.M. and ended about 8.30 P.M. The successive attacks of the French Cavalry began shortly before 4 P.M., dividing the battle into the two nearly equal parts alluded to by the Duke in (1); and it was when these attacks began that the imaginary flight of the gunners took place. There were British, King's German Legion, Hanoverian, Brunswick, and Belgo-Dutch gunners on the field.

It will clear the ground to answer at once the general question—

*Did any Gunners run off the Field?*

Not only some gunners, but whole Batteries of the Belgo-Dutch contingent quitted the field; not from cowardice, but for political reasons and from sympathy with the French. For example, when Lieutenant B. Jackson was sent to the farm of Mont St. Jean (apparently about 7 P.M.) to order a Belgo-Dutch Battery to the front, he found them cooking their dinner and enjoying themselves. On



receipt of the order, the commander of the Battery refused to move, on the plea that he had expended all his ammunition.<sup>1</sup> This plea need not be characterised.

We now proceed to inquire whether any gunners of the British or King's German Legion Artillery fled. As the Duke believed that most of them did, and that the places of the fugitives were taken by "the reserve he had kept at the commencement," it is desirable to ascertain, before going further, whether any such reserve existed in fact.

*Was there any definite Artillery Reserve during the first part of the Battle?*

The Duke originally intended to hold 3 Batteries in reserve—Ross' and Beane's Troops, and Sandham's Brigade—and to attach 6 Troops to the Cavalry. These arrangements appeared in Orders, but circumstances prevented their being carried into effect. The so-called reserves had to be brought into action at, or very soon after, the beginning of the fight; and Lord Uxbridge, probably foreseeing the desperate character of the struggle, at the same time placed the 6 Troops attached to the Cavalry entirely at the disposal of Sir Augustus Frazer, Commanding the Horse Artillery, who employed them as occasion required independently of the Cavalry.<sup>2</sup> For example, Ross' Troop (of the so-

<sup>1</sup> "Notes and Reminiscences," &c., p. 47.

<sup>2</sup> Frazer's "Letters during the Peninsular and Waterloo Campaigns," pp. 547, 558.

called reserve) came into action at the very beginning of the battle on the spot where the *pavé* from Genappe to Brussels intersected our line;<sup>1</sup> and the first shot from the British Artillery was fired by Bull's Troop, which had been posted to the Cavalry.<sup>2</sup>

Shortly after the Cavalry attacks began, the Duke ordered Sir Augustus Frazer "to bring up all the reserve Horse Artillery;"<sup>3</sup> an order which shows that the Duke was under the false impression that he had a reserve of Artillery. At this moment there happened to be 2 Troops in reserve, in the sense that they were not actively employed in the first line, and they were sent forward. One of them, Mercer's, although in the second line, had been in action and fired some rounds against the French Artillery in defiance of the Duke's order.<sup>4</sup> The other, Bull's, had suffered so severely while in action that it was withdrawn at some favourable moment and sent to the second line, "to refit and repair disabled carriages, &c."<sup>5</sup> Batteries such as these cannot be called a reserve. But let us assume

<sup>1</sup> Frazer's "Letters," &c., p. 554.

<sup>2</sup> "Lord Rokeby was close to the gun, one of Captain Bull's howitzers, from which the first shot of the battle was fired" (Lord Ellesmere's, "Personal Reminiscences of the Duke of Wellington," p. 105). The Commandant of the "Première Légère," against whom this shell was fired, was taken prisoner, and he told Col. Colborne, 52nd, after the battle that three of his men were killed (or wounded) by the first shell (Siborne's "Waterloo Letters," p. 282).

<sup>3</sup> Frazer's "Letters," &c., p. 559.

<sup>4</sup> Mercer's "Journal of the Waterloo Campaign," i. 301-302.

<sup>5</sup> Frazer's "Letters," &c., p. 557.

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that during the first half of the battle there were always 3 Batteries (although not always the same three) in reserve, in the sense of not being actively engaged. If the Duke "had no Artillery during the whole of the latter part of the action" except this reserve, then there were but 18 British guns in action during the last four hours of the battle; a conclusion which is contradicted by every account we possess of what took place.

There was no definite reserve of Artillery during the battle, for the palpable reason that our decided numerical inferiority in guns made it impossible to set one apart.

### *Did the Gunners take Shelter in the Infantry Squares?*

The order that the gunners should quit their guns on the near approach of the French Cavalry was disobeyed in one instance. Under desperate circumstances, Captain Mercer kept his men at their guns; repulsed the Cavalry, and saved two squares of Brunswickers.<sup>1</sup> By the other Batteries the order was virtually obeyed. "We retired from (our guns) only to shelter ourselves under the Infantry squares, and instantly resumed our posts the moment the Cavalry were repulsed. . . . On each charge, abandoning their guns, our men sheltered themselves between the flanks of the squares."<sup>2</sup> So wrote Sir

<sup>1</sup> Mercer's "Journal," &c., i. 313 ff.

<sup>2</sup> Frazer's "Letters," &c., pp. 547, 559.

Augustus Frazer, little dreaming of the imputation that was hanging over the heads of his men. The first passage quoted was written at 11 P.M. on the 18th June; the second was written early on the 19th.<sup>1</sup>

But Frazer does not stand alone. Other Officers, of other Arms, give precisely the same evidence. Let Officers serving on the Staff speak first.

General Sir James Shaw-Kennedy, 43rd L.I. (then Deputy-Assistant Quartermaster-General of the 3rd Division), tells us that when the French Cavalry charged, "the Officers and men of the two Brigades (Bolton's, R.A., and Cleeve's, K.G.L.) took shelter within the oblong" (*i.e.* square).<sup>2</sup>

Another Officer holding the same appointment to another Division, Lieutenant Basil Jackson, Royal Staff Corps, states that when the French Cavalry attacked, "Major Lloyd with his Officers and men sought refuge in the Guards' square. Lloyd did not enter the square, but found shelter under its lee."<sup>3</sup>

Lieutenant John Sperling, Royal Engineers, is an exceptionally good witness, because being unemployed throughout the day, he had ample time for extensive observation. He says: "Our Artillery-

<sup>1</sup> The time at which these facts were recorded is of considerable importance. "*Les Mémoires*, écrits plusieurs années après les faits, souvent même à la fin de la carrière de l'auteur, ont introduit dans l'histoire des erreurs innombrables. Il faut se faire une règle de traiter les *Mémoires* avec une défiance spéciale, comme des documents de seconde main, malgré leur apparence de témoignages contemporains" (*Introd. aux Études Historiques*, MM. Langlois et Seignobos, p. 148).

<sup>2</sup> "Notes on Waterloo," p. 116.

<sup>3</sup> "Notes and Reminiscences," &c., p. 50.

men had to take refuge in the squares, or lay down under their guns, during the Cavalry charges. The (French) Cavalry suffered in its retreat by the attacks of ours; also the gunners immediately returned to their posts."<sup>1</sup> Corporal Aldridge, Rifle Brigade, confirms one clause of this statement. "One Artilleryman who was lying under the guns jumped up with a match in his hands (on the repulse of the French) and let off two or three guns that were loaded. His comrades afterwards used to call him 'Lord Waterloo.'"<sup>2</sup>

As representatives of the Infantry service we may call two Officers of the Guards.

Lieutenant R. H. Gronow, Grenadier Guards, says that the immense loss suffered by the Household Brigade "compelled the Artillerymen to seek shelter in our squares."<sup>3</sup> He was not aware of the Duke's order on this subject.

Lieutenant Robert Batty, Grenadier Guards, is much more explicit. "The English Artillerymen, who, during these charges, retired from their guns under cover of the squares, resumed their stations the moment the enemy were past the line, in time to pour destructive volleys of round shot and grape on the retreating Squadrons."<sup>4</sup>

A Prussian Officer who was on the field, Baron

<sup>1</sup> "Letters of an Officer, Royal Engineers," p. 133. His Journal was written immediately after the battle and forwarded to his father from Brussels on the 20th June. It was not published until 1872.

<sup>2</sup> In Siborne's "Waterloo Letters," p. 302.

<sup>3</sup> "Reminiscences and Recollections," &c., 1889, i. 78.

<sup>4</sup> "Historical Sketch of the Campaign of 1815," p. 103.

von Müffling, Prince Blücher's Staff Officer attached to the British Headquarters, refers to the matter in hand. Unaware of the special order given by the Duke at Waterloo, Müffling was under the erroneous impression that it was the habit of British gunners, when charged by Cavalry, to keep up the fire as long as possible, and then take refuge behind the nearest Infantry. He says that "this plan of abandoning the guns here took place. In vain did the Cavalry of the Guard rejoice to have taken the British Artillery. They were soon obliged to abandon it, and on their retreat experienced its execution."<sup>1</sup>

The evidence of a number of Artillery Officers, to be found in Siborne's "Waterloo Letters," might be added here; but, in the first place, it is undesirable to call on Officers to testify to the conduct of their own men, and, in the second, their evidence is not wanted. Only one Artillery document (Frazer's) has been produced; and this one is of singular value, because it was written a few hours after the occurrence of the events to which it relates.

Such is the direct evidence on one side.

On the other side, the solitary piece of evidence is a letter written by the Duke of Wellington six months after the battle, in which he says that the gunners did not take shelter in the squares.

Of these two contradictory statements, one must

<sup>1</sup> "History of the Campaigns of the British and Belgo-Dutch Armies in 1815," by C. von W. (Baron von Müffling), translated by Sir John Sinclair, p. 25.

be true and the other must be false, although the veracity of the witnesses is beyond all question.

If we accept the Duke's statement we must be prepared to admit that six Officers,<sup>1</sup> who belonged to different branches of the service, and who were in different parts of the field, were simultaneously seized with the illusion that the gunners took refuge in the squares, when they really "did no such thing." As no one in possession of his reason will admit this, the independent testimony of the six Officers must be accepted.

There is not the shadow of a doubt that the gunners—the "gun-numbers"—took shelter in the squares, or, as Jackson says, "under their lee." Some few, who stood to their guns too long, were compelled to creep under the gun-carriages as Sperling and Corporal Aldridge observed.

*Did the Gunners of the British or King's German  
Legion Artillery fly from the Field?*

To answer this question we have only to throw what has preceded into logical form :—

It is self-evident that if the gunners "ran off the field" when the attacks of the French Cavalry began, they did not take shelter in the squares.

But we have indubitable evidence that they did take shelter in the squares.

Therefore they did not run off the field.

<sup>1</sup> The two Guards' Officers have been counted as one, since they belonged to the same Regiment and were in the same place.

These criticisms might be brought to a close at this point, were it not desirable to discover, if possible, the circumstances by which the Duke was misled so completely and so unfortunately.

*Did anything happen at Waterloo which might have suggested the Flight of the Gunners to an observer who was not an Artillery Officer?*

Many such things happened.

At times it was impossible to see anything beyond a very short distance. Sir Harry Smith (then Brigade-Major of the 10th, General Lambert's Brigade of Infantry) said "he never had been in any action in which the smoke so completely prevented any general perception of what was going on. There was little or no wind, and the field of action was perhaps more compact than in any other instance on record."<sup>1</sup> Now, when the gunners were ordered into the squares, the limbers were of course ordered to the rear; and Lord Fitzroy Somerset, who was with the Duke throughout the day till about 6 P.M., told Lord Ellesmere that on these occasions "the Artillerymen and horses retired to a greater distance than the Duke wished."<sup>2</sup> Thus the Duke, himself penned within a square, could see the gunlimbers hurrying to the rear and most probably vanishing in the smoke, necessarily accompanied by

<sup>1</sup> Lord Ellesmere, p. 173. What little wind there was blew from the French position towards ours.

<sup>2</sup> *Ibid.*, p. 159.



the limber-gunners who would be required to serve out ammunition when the fire was resumed. This may possibly explain the most perplexing clause of his amazing letter: "The gunners ran off . . . taking with them the limbers." When the Cavalry were repulsed and he was again at liberty, he doubtless saw guns unmanned, the gunners not having had time to extricate themselves from the squares. The men could not step into and out of an Infantry square with the same ease that they stepped into and out of their barrack-room. He also saw gunners of other guns running towards the rear—rushing to the distant limbers for ammunition. At the same time his ears informed him of delays and interruptions in the fire of guns beyond the range of vision, for which he could not readily account. To an Artillery Officer the situation would have been quite intelligible; but the Duke, with little knowledge of the details of Artillery work, misinterpreted these ambiguous movements, and drew the wrong conclusion that the gunners were running away, and in fact ran away. If so, who fired the 9467 rounds from the 78 British guns?<sup>1</sup>

<sup>1</sup> The 78 guns of 8 British Troops and 5 British Brigades. Sir Augustus Frazer (p. 150) gives the ammunition expended as 9467 rounds.

The average fire from the guns was consequently over 121 rounds per gun. There were, of course, considerable deviations from the mean. Sandham's Brigade fired 1100 rounds, or 183 rounds per gun; the Rocket Troop fired 52 rockets and 560 rounds, or 93 rounds per gun; and Mercer's Troop fired 700 rounds, or 116 rounds per gun (his "700 rounds per gun," i. 339, is an obvious error or misprint).

The interruptions in the fire were occasioned by a variety of inevitable circumstances. First, there was the smoke; secondly, there was the delay incurred by the gunners in getting out of, or coming up from, the squares; thirdly, there was unusual delay in bringing up ammunition until the limbers resumed their usual position. Lieutenant (afterwards General Sir John) Kincaid, Adjutant of the 1st Battalion, Rifle Brigade, mentions two other causes of interruption. "A good many of our guns had been disabled, and a good many more were rendered unserviceable by the unprecedented close fighting; for in several places where they had been posted but a very few yards in front of the line, it was impossible to work them."<sup>1</sup> Captain W. Siborne, R.E., adds a sixth cause. "The Artillery on the right hand of the high-road . . . was at this moment completely disabled. Two British Artillerymen were observed vainly endeavouring to serve a couple of guns,<sup>2</sup> but they were compelled to desist from the want of all material for loading."<sup>3</sup>

Enough has been said to show that the Duke's charge against the gunners at Waterloo was utterly baseless as regards the British and King's German Legion Artillery. If the gunners left their guns from time to time, it was by his own order. They

<sup>1</sup> "Adventures in the Rifle Brigade," pp. 341, 345-346. One of the most amusing military books ever written, and full of shrewd and valuable observations.

<sup>2</sup> These two guns probably belonged to Ross' (The Chestnut) Troop.

<sup>3</sup> "Waterloo," ii. 153-154.

took shelter in, or behind, the squares according to his order, and they returned to their guns without needless delay. As the guns were posted in general within a few yards of the squares, a flight of the gunners could not possibly have escaped the notice of the Infantry. But far from whispering a suspicion of cowardice or flight, the Infantry spoke highly of the Artillery. Sir James Kempt, in his Orders of the 19th June, declared that the guns of the 5th Division (the Brigades of Rogers, R.A., and Heisse, K.G.L.) were "served most nobly and judiciously placed";<sup>1</sup> and Sir James Shaw-Kennedy says: "Full scope was given to the Cavalry and Artillery to display their surpassing gallantry and excellence, and they did not fail to display these qualities in an eminent degree."<sup>2</sup> Lieutenant Batty, Grenadier Guards, speaks of our Artillery opening fire "with a promptness and precision unequalled in any other Army."<sup>3</sup> "Of that gallant Corps, the Royal Artillery," writes Lieutenant Kincaid, Rifle Brigade, "it is enough to say that they maintained their former reputation—the first in the world."<sup>4</sup>

The opinion of our Infantry Officers was shared by others. Dr. (afterwards Sir Andrew) Halliday, Medical Staff, who was looking on, said that notwithstanding the inferiority of our guns in number and calibre, "they were so well fought that I believe

<sup>1</sup> Duncan.

<sup>2</sup> "Notes on Waterloo," 178-179.

<sup>3</sup> "Historical Sketch of the Campaign of 1815," p. 89.

<sup>4</sup> "Adventures in the Rifle Brigade," 345-346.

it is allowed by all, they did equal execution" with the French guns.<sup>1</sup> A French Officer speaks of our Artillery fire throughout the day as "terrible and destructive." He adds that towards the close of the battle "no idea can be conveyed of the shock and crush that was now felt from it."<sup>2</sup> Yet at this time, according to the Mulgrave letter, 60 of our guns were deserted and only 18 were manned. Another French Officer who was present says "the Guard made several charges but was instantly repulsed, crushed by a terrible Artillery."<sup>3</sup> One of the Batteries of this terrible Artillery, which shattered with case a French column at some 50 yards range, was manned by Bolton's gunners, who had seen no previous war-service. As they fought in the first line from the very beginning of the action, they were among the gunners who, according to the Mulgrave letter, had "run off the field entirely" and whose places were taken by a reserve which never existed. There, nevertheless, face to face with the Imperial Guard, stood these young soldiers; still working the guns they never left for eight hours except, occasionally and for a few minutes, to enter the Infantry squares. It was not altogether without reason that an Officer of our Guards wrote to his friends: "The skill and courage of our Artillery could not be exceeded."<sup>4</sup>

<sup>1</sup> "Campaign of 1815," by A. Halliday, p. 128.

<sup>2</sup> "Battle of Waterloo," by a near Observer, with plates by Capt. George Jones, 10th ed., 1817, Pt. I., p. 39, n.

<sup>3</sup> *Ibid.*, Pt. I., p. 138.

<sup>4</sup> *Ibid.*, Pt. I., p. 64.

The flight of our gunners was perceptible to only one person on the field of Waterloo.

As regards the publication of the Mulgrave letter, the 2nd Duke of Wellington and Sir Herbert Maxwell stand on different ground. Having undertaken to publish his father's letters, the 2nd Duke felt bound in honour to print all he could lay hands on.<sup>1</sup> Sir Herbert Maxwell was under no such obligation. Writing, as he tells us, at the request of a publisher, his choice of documents was quite unfettered; and it was no ordinary ill-fortune that led him to include in his selection probably the only letter among the hundreds at his disposal which, from a deplorable misconception, contained an unfounded statement.

<sup>1</sup> The Duke said so to Colonel Duncan during an interview which took place about the Mulgrave letter, and Colonel Duncan told the present writer immediately afterwards. The letter was published in 1872.

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